United States Department of the Interior
Bureau of Land Management

Rawlins District Office

March 1990

Lander Final Wilderness Environmental Impact Statement

Lander
Wilderness Environmental Impact Statement

( ) Draft (X) Final Environmental Impact Statement

Type of Action: ( ) Administrative (X) Legislative

Responsible Agencies:

Lead Agency: Department of the Interior, Bureau of Land Management

Cooperating Agencies: None

Abstract

The Lander Final Wilderness Environmental Impact Statement analyzes six wilderness study areas (WSAs) in the Rawlins District to determine the resource impacts that could result from designation or nondesignation of those WSAs as wilderness. The following WSAs are recommended as nonsuitable for wilderness designation: Lankin Dome, WSA 030-120 (6,316 acres), Split Rock, 030-122 (12,749 acres), Savage Peak, 030-123a (7,041 acres), Miller Springs, 030-123b (6,429 acres), and Copper Mountain, 030-111 (6,858 acres). For the Sweetwater Canyon WSA, 030-101 (9,056 acres), 3,518 acres are recommended as nonsuitable for wilderness designation; the remaining portion (5,538 acres) is recommended for wilderness designation.

Comments have been requested and received from the following:

See the "Consultation" section.

Date draft statement made available to the Environmental Protection Agency and the public.

Draft EIS: Filed 11/7/85

Final EIS:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
WYOMING STATE OFFICE
P.O. BOX 1828
CHEYENNE, WYOMING 82003

Dear Reader:

Enclosed is the Final Environmental Impact Statement (EIS) prepared for six Wilderness Study Areas (WSAs) in the Lander Resource Area of our Rawlins District. The WSAs include; Sweetwater Canyon, Lankin Dome, Split Rock, Miller Springs, Savage Peak, and Copper Mountain. You were sent this copy because of your past interest and participation in the review of the draft version of the EIS.

The six areas described in this EIS were studied for possible wilderness designation under the authority of Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA). The Bureau of Land Management's recommendations for the six WSAs will be forwarded to the Secretary of Interior who will then forward his recommendations to the President. The President, in turn, will forward his recommendations to Congress. Only Congress can designate an area as wilderness. The next opportunity for public comment regarding whether or not these areas should be added to the wilderness system will be during the legislative process.

Thank you for your interest in the Bureau's wilderness study. For further information, please contact: District Manager, Rawlins District Office, Bureau of Land Management, P.O. Box 670, Rawlins, Wyoming 82301.

Sincerely,

Ray Brubaker
Wyoming State Director

FINAL

LANDER WILDERNESS ENVIRONMENTAL IMPACT STATEMENT

for the

LANDER RESOURCE AREA

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Rawlins District
Rawlins, Wyoming

1989

Ray Brubaker
Wyoming State Director

12-8-89
Date

TABLE OF CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

CONTENTS

APPENDIXES

PHOTOS

MAPS

TABLES

SUMMARY

This Environmental Impact Statement (EIS) analyzes the impacts that would result from designating or not designating six wilderness study areas (WSAs) as wilderness. The proposed action recommends a nonwilderness designation for five of the WSAs: WSA 030-120, Lankin Dome (6,316 acres), WSA 030-122 Split Rock (12,749 acres), WSA 030-123a Savage Peak (7,041 acres), WSA 030-123b Miller Springs (6,429 acres), and WSA 030-111 Copper Mountain (6,858 acres). The proposed action also recommends a portion of WSA 030-101 Sweetwater Canyon for nonwilderness designation (3,518 acres) and a portion for wilderness designation (5,538 acres).

Several significant environmental issues developed in the study process. Issues common to all WSAs include: (1) impacts on wilderness values and (2) impacts on the development of energy and mineral resources. For Sweetwater Conyon and Copper Mountain an issue of impacts on recreation use was developed. For the Sweetwater Rocks WSA complex, an issue of impacts on local ranching operations was developed.

The alternatives for each WSA and the significant impacts are summarized below.

ALTERNATIVES AND SIGNIFICANT IMPACTS BY WSA

Sweetwater Canyon

Proposed Action (Partial Wilderness)

As stated above, the Proposed Action would recommend 5,538 acres for wilderness designation and 3,518 acres for nonwilderness.

Significant impacts under the Proposed Action relate to the retention of wilderness values and the development of locatable mineral deposits. Wilderness values would be retained on 5,538 acres, which include the river canyon itself. The same area would be withdrawn from all forms of mineral entry so that future opportunities to explore for and develop locatable minerals would be forgone on 5,538 acres. The remaining 3,518 acres of nonwilderness would be available for mineral entry, but no activity other than annual assessment work on existing mining claims is anticipated.

No Wilderness Alternative

All 9,056 acres of the Sweetwater Canyon WSA would be recommended as nonsuitable for wilderness designation.

The major impacts under this alternative relate to the potential loss of wilderness values over the long term. Here, wilderness values would not be assured long-term protection under the provisions of the 1964 Wilderness Act. Assessment work on existing claims covering about 1,000 acres would not have a significant impact on wilderness values.

All Wilderness Alternative

All 9,056 acres of the Sweetwater Canyon would be recommended for wilderness designation.

Under this alternative, wilderness values would be protected in the entire WSA. The WSA would be withdrawn from mineral entry, so that future opportunities to explore for and develop locatable mineral resources would be forgone on 9,056 acres.

Lankin Dome

Proposed Action (No Wilderness)

Under the Proposed Action, the entire 6,316-acre Lankin Dome WSA would be recommended as nonsuitable for wilderness designation.

Wilderness values in the entire WSA would not be assured long-term protection under the provisions of the 1964 Wilderness Act. Annual assessment work on one existing jade mining claim is the only management action anticipated; this action would not affect wilderness values. No other management actions are anticipated that would affect wilderness values in the WSA.

All Wilderness Alternative

All 6,316 acres of the Lankin Dome WSA would be recommended for wilderness designation.

Wilderness values would be given long term protection in the entire WSA. Because the entire WSA would be designated wilderness, all of its 6,316 acres would be withdrawn from mineral entry. Assessment work would continue on the existing jade claim. A slight increase in recreation use in the WSA and displacement of vehicle-dependent recreation onto adjacent private land would result in an additional ten contacts between recreationists and landowners.

Split Rock

Proposed Action (No Wilderness)

Under the Proposed Action, the entire 12,789-acre Split Rock WSA would be recommended as nonsuitable for wilderness designation.

Wilderness values in the entire WSA would not be assured long-term protection under the provisions of the 1964 Wilderness Act. Annual assessment work on one existing jade mining claim is the only management action anticipated; this action would not affect wilderness values. No other management actions are anticipated that would affect wilderness values in the WSA.

All Wilderness Alternative

All 12,789 acres of the Split Rock WSA would be recommended for wilderness designation.

Wilderness values would be given long term protection in the entire WSA. Because the entire WSA would be designated wilderness, all of its 12,789 acres would be withdrawn from mineral entry. Assessment work would continue on the existing jade claim. A slight increase in visitation in the WSA and displacement of vehicle-dependent recreation onto adjacent private land would result in an additional 15 contacts between recreationists and landowners.

Savage Peak

Proposed Action (No Wilderness)

Under the Proposed Action, the entire 7,041-acre Savage Peak WSA would be recommended as nonsuitable for wilderness designation.

Wilderness values in the entire WSA would not be assured long-term protection under the provisions of the 1964 Wilderness Act. However, no management actions are anticipated that would affect wilderness values in the WSA.

All Wilderness Alternative

All 7,041 acres of the Savage Peak WSA would be recommended for wilderness designation.

Wilderness values would be given long term protection in the entire WSA. Because the entire WSA would be designated wilderness, all of its 12,789 acres would be withdrawn from mineral entry. A slight increase in visitation in the WSA and displacement of vehicle-dependent recreation onto adjacent private lands would result in an additional ten contacts between recreationists and landowners.

Miller Springs

Proposed Action (No Wilderness)

Under the Proposed Action, the entire 6,429-acre Miller Springs WSA would be recommended as nonsuitable for wilderness designation.

Wilderness values in the entire WSA would not be assured long-term protection under the provisions of the 1964 Wilderness Act. Annual assessment work on one existing jade mining claim is the only management action anticipated; this action would not affect wilderness values. No other management actions are anticipated that would affect wilderness values in the WSA.

All Wilderness Alternative

All 6,429 acres of the Miller Springs WSA would be recommended for wilderness designation.

Wilderness values would be given long term protection in the entire WSA. Because the entire WSA would be designated wilderness, all of its 6,429 acres would be withdrawn from mineral entry. Assessment work would continue on the existing jade claim. A slight increase in recreation use in the WSA and displacement of vehicle-dependent recreation onto adjacent private lands would result in an additional five contacts between recreationists and landowners.

Copper Mountain WSA

Proposed Action (No Wilderness)

Under the Proposed Action, the entire 6,858-acre Copper Mountain WSA would be recommended as nonsuitable for wilderness.

Significant impacts relate to the retention of wilderness values and development of oil and gas resources. The entire WSA would be open to all forms of mineral entry and leasing. It is expected that a small oil and gas field, consisting of four producing wells, would be developed over the long term along the southern edge of the WSA. Because of anticipated oil and gas field development, naturalness and solitude would be lost on 840 acres.

All Wilderness Alternative

All 6,858 acres of the Copper Mountain WSA would be recommended for wilderness designation.

Wilderness values would be retained over the entire 6,858-acre WSA. Because the entire WSA would be designated wilderness, all of its 6,858 acres would be withdrawn from mineral entry and leasing. There would be no oil and gas field development. Future opportunities to explore for and develop mineral resources would be forgone on 6,858 acres.

ABBREVIATIONS

AUM	Animal Unit Month
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act (of 1976)
NEPA	National Environmental Policy Act (of 1969)
NHT	National Historic Trail
NSO	No Surface Occupancy (a stipulation on an oil and gas lease)
NWPS	National Wilderness Preservation System
ORV	Off-road Vehicle
RMP	Resource Management Plan (BLM land use plan under FLPMA)
SHPO	State Historic Preservation Officer
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WGFD	Wyoming Game and Fish Department
WSA	Wilderness Study Area

CHAPTER 1

INTRODUCTION AND PLANNING PROCESS

PURPOSE AND NEED

This Wilderness Environmental Impact Statement (EIS) is being prepared in response to Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA). This law directs the Bureau of Land Management (BLM) to inventory, study, and report to Congress, through the Secretary of the Interior and the President, the public lands preliminarily determined to be suitable for inclusion in the National Wilderness Preservation System (NWPS).

The BLM has established the end of fiscal year 1991 as its goal for completing wilderness studies and reporting to the Secretary of the Interior the suitability or nonsuitability of all wilderness study areas (WSAs) for wilderness designation. This EIS satisfies the study requirements for six of the 40 BLM wilderness study areas in Wyoming.

According to FLPMA, the Secretary of the Interior must report his recommendations to the President by October 21, 1991. The President has until October 21, 1993, to send his recommendations to Congress. Only Congress has the authority to designate any of the study areas as wilderness or release them from study status as nonsuitable.

The purpose of this EIS is to analyze the effects on present or potential resource uses that would result from wilderness designation or nondesignation of six WSAs in central Wyoming. They are Sweetwater Canyon WSA, Copper Mountain WSA, and four WSAs collectively known as the Sweetwater Rocks WSAs: Lankin Dome, Split Rock, Savage Peak, and Miller Springs. The six WSAs considered in this EIS constitute approximately 2% of the public land in the Lander Resource Area and cover a total of 48,489 acres. Table 1 lists the areas and acreages under wilderness study in the Lander Resource Area.

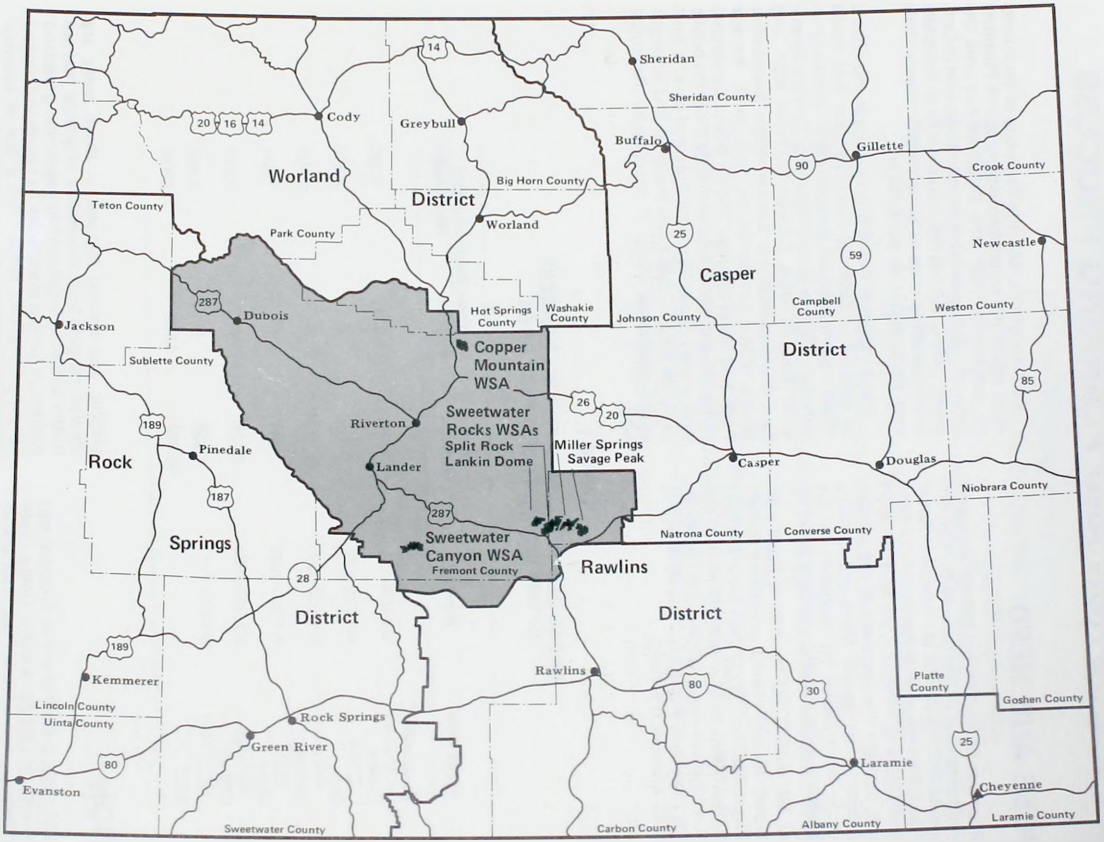
TABLE 1

AREAS BEING STUDIED FOR WILDERNESS IN THE LANDER RESOURCE AREA

Study Area	Number	Total Acreage	Acres Recommended	
			Suitable	Nonsuitable
Sweetwater Canyon	WY-030-101	9,056	5,538	3,383
Lankin Dome	WY-030-120	6,316	0	6,316
Split Rock	WY-030-122	12,789	0	12,789
Savage Peak	WY-030-123a	7,041	0	7,041
Miller Springs	WY-030-123b	6,429	0	6,429
Copper Mountain	WY-030-111	6,858	0	6,858
Total		**48,489**	**5,538**	**42,816**

LOCATION

The six WSAs being studied are in Fremont and Natrona counties, Wyoming. Lankin Dome, Split Rock, Miller Springs, and Savage Peak WSA are all about 60 miles west southwest of Lander. The Sweetwater Canyon is about 40 miles south southwest of Lander, and the Copper Mountain WSA is about 50 miles northeast of Lander (see map 1). The topographic and natural features in these areas are diverse, ranging from mountains of granite that are nearly barren of vegetation to sagebrush-grassland prairies, to juniper woodlands, to a deep and rugged canyon. Elevations range from a low of approximately 6,000 feet on the Sweetwater River near Devil's Gate to more than 8,000 feet on the summit of McIntosh Peak, the highest point in the Sweetwater Rocks WSAs.



Map 1
General Location
Wilderness Study Areas

ENVIRONMENTAL ISSUE IDENTIFICATION/SCOPING

The scoping process for the Lander Wilderness Environmental Impact Statement (EIS) encompasses issues identified by the BLM staff, the public, and government agencies at all levels. Scoping occurred throughout the development of the Lander Resource Management Plan (USDI, BLM 1986); numerous meetings were held with individuals, interest groups, industry representatives, and government agencies.

The draft Lander Wilderness EIS was released for public review and comment in November 1985. The formal comment period was open until mid-February 1986. Public hearings were held on December 11 and 12, 1985, in Dubois, Wyoming and Lander, Wyoming, respectively.

During the scoping process, consultation continued with the Wyoming State Historic Preservation Officer (SHPO) concerning the presence or absence of sites in the WSAs that would be eligible for nomination for listing on the "National Register of Historic Places." Consultation with the U.S. Fish and Wildlife Service concerning the threatened or endangered species has occurred. The environmental issues selected for analysis in this EIS follows.

Issues Selected for Analysis

Impacts on Wilderness Values

The wilderness values of naturalness, solitude, and primitive recreation could benefit from wilderness designation. The same values may be adversely affected by uses and actions that would occur should the WSAs not be designated wilderness. The degree to which these values would or would not be preserved is an issue for analysis in the EIS.

Impacts on the Development of Energy and Mineral Resources

Wilderness designation could affect the ability to explore for and develop mineral resources by withdrawing designated lands from mineral leasing and entry. The effect of wilderness designation on the development of mineral resources is an issue for analysis in the EIS.

Impacts on Recreation and Off-Road Vehicle Use in the Sweetwater Canyon WSA and the Copper Mountain WSA

Wilderness designation would eliminate the use of recreational off-road vehicles (ORVs) in the Sweetwater Canyon WSA. Because most ORV use in the WSA is in support of other activities such as hunting and fishing, elimination of vehicles in the WSA could affect the availability of other recreation opportunities in the WSA and shift ORV uses currently occurring in the WSA to adjacent public and private lands (see Map 2 in Chapter 2). Elimination of ORVs might also help preserve opportunities for nonmotorized forms of recreation. The impact of wilderness designation on recreation and ORV use in the vicinity of the Sweetwater Canyon WSA is an issue for analysis in this EIS.

Impacts on Local Ranching Operations

If the WSAs in the Sweetwater Rocks complex (Lankin Dome, Split Rock, Miller Springs, and Savage Peak WSAs) were designated wilderness, vehicle-dependent recreation use could be displaced onto adjacent private lands that surround the WSAs (illustrated on Map 2 in Chapter 2) as a result of the ORV elimination inherent in a wilderness designation. In addition, it is estimated that nonmotorized forms of recreation would increase slightly (approximately 5%) after designation of the WSAs as wilderness. More people would become aware of the areas because they lie adjacent to a major tourist route to Yellowstone National Park. The areas would probably be portrayed in promotional materials to entice travelers to use this route to get to the national park. These two factors could result in increased contacts between adjacent landowners and recreationists seeking permission to cross private land or in trespass. This would, in turn, be disruptive to the adjacent landowner's ranching operation. Therefore, the effect of wilderness designation of these WSAs on recreation use and the impacts to adjacent landowners is an issue for analysis in this EIS.

Issues Not Selected for Analysis

The following issues were identified in scoping, but were not selected for detailed analysis in the EIS. The reasons for setting the issues aside are discussed below.

Impacts on Livestock Operations

Concerns were raised that wilderness designation could reduce or eliminate livestock grazing in the WSAs. For operators in the four Sweetwater Rocks WSAs and the Copper Mountain WSA, no change is anticipated due to wilderness designation. BLM's management of grazing in these areas would essentially be the same, with or without wilderness designation. Therefore, this issue was not selected for further analysis.

In the Sweetwater Canyon WSA, conflicts between recreation users and livestock in the canyon bottom may result in more BLM management concern. Recreationists may want a total elimination of livestock from the canyon, or may want a change in the season of use to avoid the heavily used summer months. Livestock operators may want the BLM to significantly reduce visitation by using some type of limited quota permit system. Given that visitor use is not predicted to increase substantially and livestock numbers are not likely to change due to wilderness designation, the level of conflict is not expected to rise as a direct result of either designation or nondesignation. As a result, this issue was not selected for analysis.

However, because livestock grazing is a major activity in all of the WSAs, livestock management in the WSAs will be described for each alternative in Chapter 2 and again in Chapter 3.

Impacts on Threatened or Endangered Species

Wildlife and vegetation inventories and consultation with the U.S. Fish and Wildlife Service indicate that no threatened or endangered species are known to occur in the WSAs. Therefore, this issue was dropped from further consideration.

Impacts on Prehistoric Resources

Consultation with the State Historic Preservation Office during scoping and review of existing inventory information indicate that the WSAs do contain prehistoric resource sites. The prehistoric sites within the WSAs that appear to be eligible for inclusion on the National Register would be protected under current law with or without wilderness designation. Prior to any surface disturbing activity, an on-site cultural resource survey of the project area would be conducted and adverse impacts to significant cultural resource sites would be mitigated. Because developments even under the No Wilderness Alternative would not cause significant impacts to the sites, this issue was dropped from further analysis.

Impacts on Recreation in the Sweetwater Rocks WSA Complex

The issue of impacts on recreation from wilderness designation or nondesignation in the Sweetwater Rocks WSA complex (Lankin Dome, Split Rock, Savage Peak, and Miller Springs) was not selected for analysis. Impacts on recreation use in these WSAs are described under "Impacts on Local Ranching Operations." The two issues are interrelated in that projected changes in use patterns and recreation management actions affect both, but the impacts are best described under "Impacts on Local Ranching Operations." As a result, this issue was not selected for analysis. However, recreation management will be described for each alternative in Chapter 2 and again in Chapter 3.

Impacts on Historic Trails

Concerns were raised by the public about the effects that wilderness designation or nondesignation may have on the protection of historic trails within or adjacent to the WSAs. Although the Oregon and Mormon Pioneer National Historic Trails (NHT) and the proposed Pony Express NHT make up a small portion of the Sweetwater Canyon WSA's northern boundary (less than two miles), they do not enter the WSA. Similarly, none of the historic trails enter the Lankin Dome, Split Rock, Savage Peak, or Miller Springs WSAs, nor do the trails help form the WSAs' boundaries. Management of the NHTs would remain unchanged regardless of whether or not any of the WSAs were designated wilderness.

Further, the two Oregon Trail withdrawals (one in Sweetwater Canyon WSA for the 1824 South Pass discovery brigade camp, and the other in Split Rock WSA for the Split Rock National Register Site) are both closed to all forms of mineral entry and leasing, and this would remain the same with or without wilderness.

Because the NHTs and their related sites would be unaffected and remain unchanged by wilderness designation or nondesignation, this issue was dropped from further analysis.

Impacts on Forest Management

None of the WSAs described in this EIS contain commercial timber resources or forested lands. Therefore, this issue was dropped from further consideration.

Impacts on Water Quality in the Sweetwater Canyon WSA

Concerns were raised regarding how water quality would be affected by wilderness designation or nondesignation in the Sweetwater Canyon WSA. This was dropped from analysis in the EIS because the primary influence on water quality in this WSA (livestock grazing) would not vary significantly with either designation or nondesignation. Other activities, such as mining claim assessment work, would be of such small scale and would affect such a small area that their influence on water quality would be negligible.

Impacts on Wildlife and Fisheries

Concerns regarding impacts of wilderness designation or nondesignation on wildlife and fisheries were raised during the formal comment period. This issue was dropped from further analysis in the EIS because projected developments in the six WSAs would not result in any significant change to any specific wildlife population or fishery, with or without wilderness designation. However, because of the public concern regarding wildlife and fisheries in the WSAs, wildlife and fisheries management will be discussed for each WSA in Chapter 2 and again in Chapter 3 (fisheries for Sweetwater Canyon only).

DEVELOPMENT OF ALTERNATIVES

To analyze the six WSAs adequately for wilderness suitability, the BLM developed a set of alternatives that were considered reasonable for each WSA. In each WSA, two required alternatives, All Wilderness and No Wilderness, were analyzed.

For Sweetwater Canyon, a Partial Wilderness alternative was analyzed. The Partial Wilderness alternative, which is the Proposed Action, would resolve some of the conflicts of vehicle access and would preserve the canyon itself as wilderness. This alternative would preserve as wilderness that part of the WSA generally inaccessible to vehicles. The alternative would help resolve the management problem of unauthorized vehicle use in designated wilderness by eliminating that portion where vehicle use is not easily controllable by natural terrain. Alternatives include: (a) No Wilderness; and (b) All Wilderness.

The alternatives considered for Lankin Dome, Split Rock, Savage Peak, and Miller Springs WSAs were All Wilderness and No Wilderness which is the Proposed Action for these WSAs.

In the Copper Mountain WSA, only two alternatives were considered reasonable, All Wilderness and No Wilderness. The No Wilderness alternative is the Proposed Action for the Copper Mountains WSA.

Partial wilderness alternatives that would recommend for wilderness something less than the entire acreage of the Lankin Dome, Split Rock, Savage Peak, Miller Springs, and Copper Mountain WSAs were considered but not analyzed as separate alternatives. Reducing the size would not significantly reduce resource conflicts, improve the quality of the wilderness values, or improve the WSAs' manageability while maintaining essential wilderness attributes.

However, when the four Sweetwater Rocks WSAs are viewed in combination, Congress could choose to designate any number of them as wilderness. Thus the No Wilderness and All Wilderness alternatives presented for each WSA in this EIS do represent several possible Partial Wilderness alternatives that are available to Congress.

CHAPTER 2

PROPOSED ACTION AND ALTERNATIVES

Since the pattern of future actions cannot be predicted with certainty, assumptions must be made to allow impact analysis to be performed. These assumptions are the basis of the scenarios developed in this impact statement. They are not management plans or proposals, but are believed to represent reasonable patterns of activities which could occur as a result of this action.

SWEETWATER CANYON

Proposed Action (Partial Wilderness)

Under the Partial Wilderness alternative, a 5,538-acres portion of the 9,056 acres of Sweetwater Canyon WSA would be recommended for wilderness designation (see Map 2). The boundary has been changed from the draft EIS to follow legal subdivisions. This reduced the area by 222 acres. The area proposed for wilderness designation would include the "core area," or the canyon itself. The remaining 3,518 acres of the WSA would be managed for multiple uses other than wilderness.

Livestock Grazing Management

Livestock would continue to be managed as described in the Green Mountain rangeland program summary (USDI, BLM 1983a). There are two grazing allotments in the Sweetwater Canyon WSA, Green Mountain Common (allotment 2001) and Silver Creek (allotment 1903). These two allotments produce 597 animal unit months (AUMs) of forage in the 5,538 acres proposed for designation and 362 AUMs in the 3,518 acres proposed for nonwilderness.

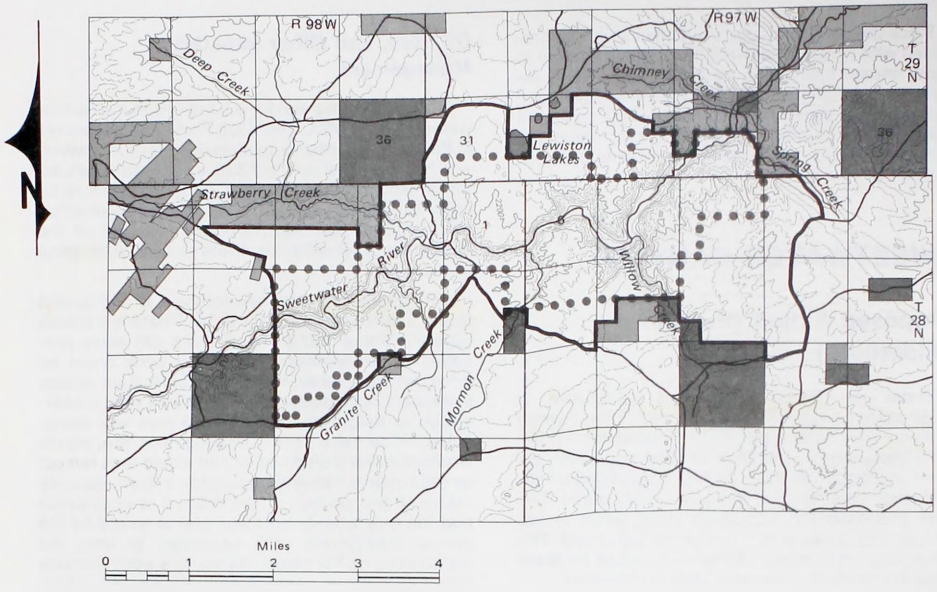
No management actions are proposed for the foreseeable future in this alternative that would change kind of livestock, numbers, or season of use. No range improvement projects are planned for the area. No motorized equipment would be allowed in the portion of the WSA recommended for wilderness designation.

Oil, Gas, and Other Minerals Management

There is no potential for oil and gas in the Sweetwater Canyon WSA. There are no oil and gas leases in the WSA. No leasing, exploration, or development would be allowed on the 5,538 acres recommended for wilderness. The remaining 3,518 acres would be open to leasing according to standard protection requirements (see Appendix C). Because of the area's lack of potential for oil and gas, no exploration is expected.

No locatable mineral development is anticipated in the Sweetwater Canyon WSA. There are claims covering about 720 acres of the 5,538 acres proposed for wilderness. Before any work could be done on these claims, the BLM would initiate validity examinations to determine if any had a valid discovery on or before the date that the area was designated wilderness. It is assumed that the claims would hold valid discoveries and would thus remain as valid claims. However, based on known resource values in this portion of the WSA, it is anticipated that the only activity on these claims would be the annual assessment work necessary to keep the claims current. For placer claims, this would include activities such as panning and using small, hand-operated sluice boxes. For lode claims, activities would include hand-sampling of small amounts of ore for assessment. No vehicular access or motorized equipment would be necessary. No large-scale development is expected. Annual assessment work would disturb a maximum of 5 acres over the long term.

On the basis of current information, large-scale exploration and development of locatable minerals is not anticipated on the 3,518 acres recommended for nonwilderness; however, the area would continue to remain open to mineral entry and mining under existing mining law. About 280 acres are covered by mining claims at present in the portion recommended for nonwilderness. Although no development of these claims is anticipated, annual assessment work such as that described earlier would disturb a maximum of 5 acres over the long term.



Map 2
Proposed Action (Partial Wilderness)
Sweetwater Canyon

Recreation Management

Under the Proposed Action, the 5,538 acres recommended for wilderness would be closed to off-road vehicles (ORVs), and motorized forms of recreation would be excluded. Approximately 2 miles of two-track access would be closed. The portion of the WSA recommended for wilderness would be open to other recreation activities, including hunting, fishing, camping, photography, and sightseeing. Recreational use for these activities is estimated to be 850 visitor days annually. While projections indicate that use may increase slightly, it would remain below 1,000 visitor days annually for the foreseeable future.

The remaining 3,518 acres would provide for dispersed recreation such as hunting, fishing, and hiking. ORV travel would be limited to 2 miles of existing roads and trails, as outlined in the Lander RMP/EIS (USDI, BLM 1986). Recreational ORV use in this portion of the WSA is estimated to be 150 visitor days annually. Projections indicate that recreational ORV use would increase slightly but would remain below 250 visitor days annually for the foreseeable future.

Other recreation activities such as hunting, camping, photography, and sightseeing would continue in this portion of the WSA. Use for these activities is estimated to be 400 visitor days annually. Projections indicate that use would increase slightly, but would remain below 750 visitor days annually for the foreseeable future.

Wildlife and Fisheries Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the Wyoming Game and fish Department (WGFD). Fisheries would be managed according to WGFD regulations. No other wildlife or fisheries management actions are planned for the Sweetwater Canyon WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under the Proposed Action that would require cultural resource investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

No Wilderness Alternative

Under this alternative, none of the 9,056 acres would be recommended for wilderness designation. The land would be open for multiple-use management.

Livestock Grazing Management

Management of grazing would be the same as in the Proposed Action, with portions of two allotments in the WSA providing 959 AUMs of grazing. No management actions are proposed at this time that would change the kinds of livestock, numbers, or seasons of use. Motorized equipment would be allowed, with vehicle use restricted to existing trails.

Oil, Gas, and Other Minerals Management

Approximately 5,000 acres (generally the canyon itself) would be subject to a no surface occupancy (NSO) restriction for purposes of oil and gas leasing. On the basis of information currently available, it appears that the area has no potential for the occurrence of oil and gas; therefore, oil and gas exploration or field development is not anticipated. Outside of the NSO areas, oil and gas leasing would continue under the standard protection requirements (see appendix C). Accordingly, surface disturbance would be prohibited in sensitive areas such as live waters or on slopes in excess of 25%. Other areas would be available for exploration by drilling, but no exploratory drilling would be expected.

About 5,000 acres of the WSA would be subject to a locatable mineral withdrawal. There are about 720 acres covered by claims in this area. Before any work could be done on these claims, the BLM would initiate validity examinations to determine if any had a valid discovery on or before the date that the area was designated wilderness. It is assumed that the claims would hold valid discoveries and would thus remain as valid claims, subject to regulation under 43 CFR 3809. However, based on known resource values in this portion of the WSA, it is anticipated that the only activity on these claims would be the annual assessment work (such as that described earlier) necessary to keep the claims current. No large-scale development is expected. Annual assessment work would disturb a maximum of 5 acres over the long term.

On the 4,056 acres that would remain open to mineral entry, large-scale development is not anticipated. There are about 280 acres covered by claims in this portion of the WSA. As required by 43 CFR 3809 regulations, a plan of operations would be required for all surface disturbance in excess of five acres; a notice of intent would be required for activities creating disturbance of five acres or less. Because of the quantity and quality of material in this portion of the WSA, activity on these claims is anticipated to be only the minimum assessment work necessary to keep the claims current. Annual assessment work would disturb a maximum of 5 acres over the long term.

Recreation Management

The ORV designation outlined in the Lander RMP/EIS (USDI, BLM 1986) would remain in effect for the Sweetwater Canyon, and ORV travel would be limited to existing roads and trails (about 3½ miles). Recreational ORV use for the entire WSA is estimated to be 250 visitor days annually. Projections indicate that use would increase slightly but would remain below 300 visitor days annually for the foreseeable future.

The WSA would be open to other recreation activities besides ORV use, including hunting, fishing, camping, photography, and sightseeing. Visitor use for these activities is estimated to be 1,250 visitor days. Projections indicate that use would increase slightly but would remain below 1,750 visitor days annually for the foreseeable future.

Wildlife and Fisheries Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. Fisheries would be managed according to WGFD regulations. No other wildlife or fisheries management actions are planned for the Sweetwater Canyon WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

All Wilderness Alternative

Under the All Wilderness alternative, all of the Sweetwater Canyon WSA (9,056 acres) would be recommended for wilderness designation.

Livestock Grazing Management

Livestock would continue to be managed as described in the Green Mountain Rangeland Program Summary (USDI, BLM 1983). Portions of two grazing allotments in the Sweetwater Canyon WSA, Green Mountain Common (2001) and Silver Creek (1903), produce 959 AUMs for forage in the 9,056 acres of the WSA. No management actions are proposed at this time in this alternative that would change kind of livestock, numbers, or season of use. No range improvement projects are planned for the area. No motorized equipment would be allowed in the area.

Oil, Gas, and Other Minerals Management

Under this alternative, the entire 9,056 acres of the Sweetwater Canyon WSA would be closed to oil and gas leasing. There are about 1,000 acres of lode and placer claims (15 lode and 6 placer) in the WSA. Before any work could be done on these claims, the BLM would initiate mineral validity examinations to determine if any had a valid discovery on or before the date that the area was designated wilderness. It is assumed that the claims would hold valid discoveries and would thus remain as valid claims, subject to regulation under 43 CFR 3809. However, based on known resource values in the WSA, it is anticipated that the only activity on these claims would be the annual assessment work (such as described earlier) necessary to keep the claims current. No large-scale development is expected. No vehicular access would be needed. Annual assessment work would disturb a maximum of 10 acres over the long term.

Recreation Management

Under this alternative, the WSA would provide for primitive forms of recreation such as hunting, fishing, and backpacking. The area would be closed to ORV use, and motorized forms of recreation would be excluded. About 3½ miles of trail would be closed to vehicles under this alternative.

The WSA would be open to other recreation activities, such as hunting, fishing, camping, sightseeing, and photography. Visitation for these activities was estimated to be 1,250 visitor days in 1983. Projections indicate that use would increase slightly but would remain below 1,750 visitor days annually for the foreseeable future.

Wildlife and Fisheries Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. Fisheries would be managed according to WGFD regulations. No other wildlife or fisheries management actions are planned for the Sweetwater Canyon WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

LANKIN DOME

Proposed Action (No Wilderness)

Under the Proposed Action, the Lankin Dome WSA would be recommended for nonwilderness uses. No special legislative protection would be given to the 6,316 acres of the Lankin Dome WSA (See Map 3).

Oil, Gas, and Other Minerals Management

Under the Proposed Action, the entire WSA would be open to mineral entry and leasing. There are two oil and gas leases in the Lankin Dome WSA. On the basis of current information, there is no potential for the occurrence of oil and gas in the WSA. Therefore, there is no likelihood of exploration or development.

The entire WSA would continue to be open to locatable mineral entry under the General Mining Law. The only claim that has been filed in this WSA is on a jade occurrence. Small-scale development of this claim would be expected to result in less than 5 acres of surface disturbance over the long term. Prospecting and exploration for other minerals in the WSA have been low to nonexistent, and no exploration or development is expected in the foreseeable future.

Livestock Grazing Management

The Lankin Dome WSA would continue to provide 373 AUMs for livestock use in portions of five allotments. No new range improvements are planned. The use of motorized vehicles would continue for the purpose of livestock management.

Recreation Management

Under the Proposed Action, ORV travel would be limited to 2½ miles of existing trails. Recreational ORV use is estimated at 50 visitor days per year and would remain at that level for the next ten years.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed hiking or backpacking trails exist in the WSA, and none are planned. Recreation use would remain stable at 200 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under the Proposed Action that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

All Wilderness Alternative

Under the All Wilderness alternative, all of the Lankin Dome WSA (6,316 acres) would be recommended for designation as wilderness.

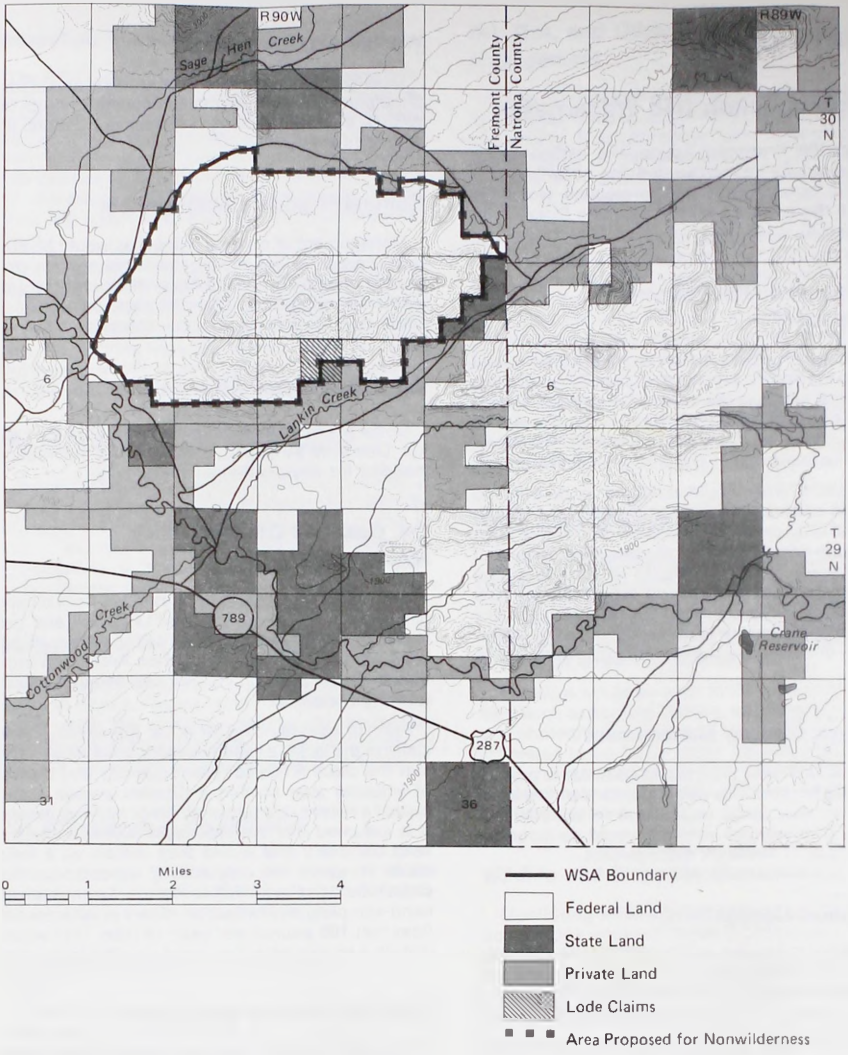
Oil, Gas, and Other Minerals Management

The entire WSA would be withdrawn from oil and gas leasing. There are no pre-FLPMA oil and gas leases in the WSA. The post-FLPMA leases in the WSA are subject to the Wilderness Protection Stipulation (see appendix A). No new mineral leases would be allowed.

Prior to commencing work on the existing jade claim in the WSA, a validity examination must show that the claim holds sufficient quantity and quality of valuable jade so that a prudent person could expect a reasonable return on his or her investment. It is assumed that the jade claim would contain a valid discovery and would thus remain as a valid claim. However, the only activity expected on this claim would be the annual assessment work such as hand-sampling and extraction of very small amounts (less that 100 pounds per year) of jade. This would disturb a maximum of five acres over the long term.

Livestock Grazing Management

The Lankin Dome WSA would continue to provide 373 AUMs for livestock use in portions of five grazing allotments. No new improvements are planned. The use of motorized vehicles to manage livestock would be precluded.



Map 3
Proposed Action (Nonwilderness)
Lankin Dome

Recreation Management

The WSA would be closed to all off-road vehicle use. Motorized forms of recreation would be excluded; 2½ miles of two-track access would be closed.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. It is estimated that there would be a slight (5%) increase in recreation use after designation. Projections indicate that recreation use would increase slightly to 210 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

SPLIT ROCK

Proposed Action (No Wilderness)

Under the Proposed Action, the Split Rock WSA would be recommended for nonwilderness uses. No special legislative protection would be given to the 12,789 acres of the Split Rock WSA (See Map 4).

Oil, Gas, and Other Minerals Management

The Split Rock WSA would be open to oil and gas leasing. On the basis of current information, there is no potential for the discovery of oil and gas in the Split Rock WSA. Therefore, the likelihood of exploratory drilling is considered nil, and the anticipated use of the lands would not be expected to differ from past uses. No exploratory drilling would occur.

Under the Proposed Action, the WSA would remain open to locatable mineral entry under the General Mining Law. One claim has been filed in this WSA on an area of jade occurrence. Small-scale development of this claim would be expected to result in less than 20 acres of surface disturbance over the long term. Prospecting and exploration for other minerals in the WSA have been low to nonexistent, and no exploration or development is expected in the foreseeable future.

Livestock Grazing Management

The Split Rock WSA would continue to provide 1,141 AUMs for livestock use in portions of four allotments. No new range improvements are planned. The use of motorized vehicles would continue for the purpose of livestock management.

Recreation Management

Under the Proposed Action, ORV travel would be limited to 1½ miles of existing roads and trails. Recreational ORV use is estimated to be 250 visitor days per year and would remain at this level for the next ten years.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. Recreational use for these activities would remain below 1,500 visitor days for the next ten years.

Wildlife Management

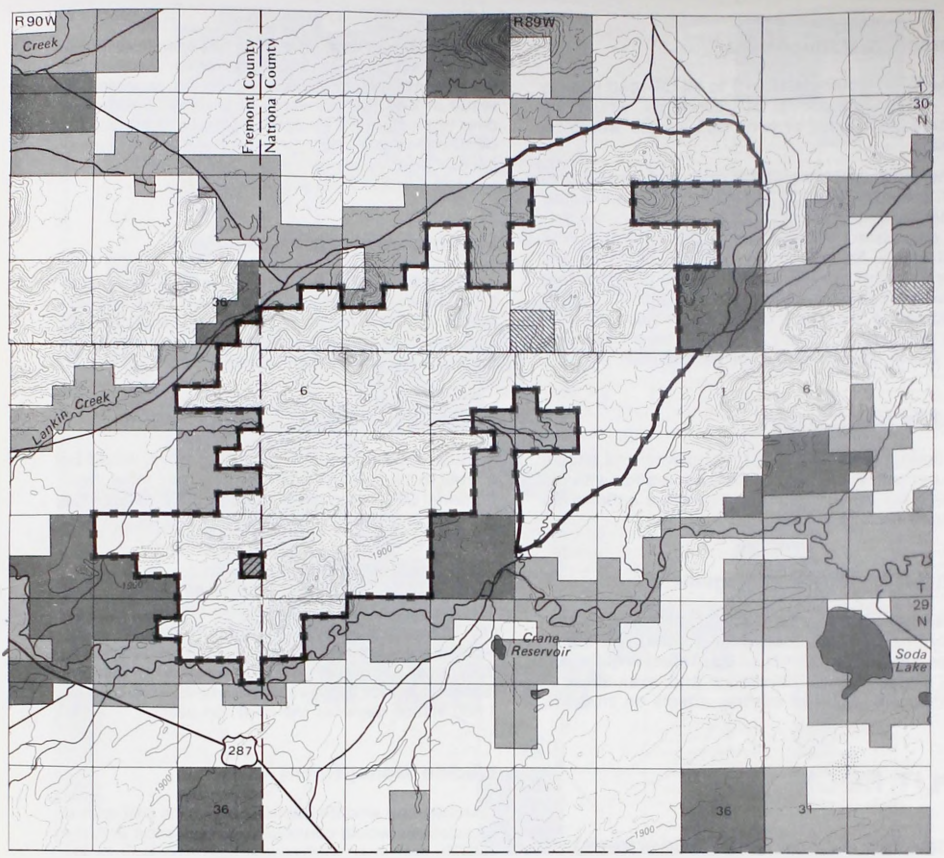
Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under the Proposed Action that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

All Wilderness Alternative

Under the All Wilderness alternative, all 12,789 acres of the Split Rock WSA would be recommended for designation as wilderness and would be given the special legislative protection afforded to designated wilderness.



Map 4
Proposed Action (Nonwilderness)
Split Rock

Oil, Gas and Other Minerals Management

The entire WSA would be withdrawn from oil and gas leasing. There are no pre-FLPMA oil and gas leases in the WSA. The two post-FLPMA leases in the WSA are subject to the Wilderness Protection Stipulation (see Appendix A). No new oil and gas leases would be allowed.

Prior to commencing work on the existing jade claim in the WSA, a validity examination must show that the claim holds sufficient quantity and quality of valuable jade to that a prudent person could expect a reasonable return on his or her investment. It is assumed that the jade claim would contain a valid discovery and would remain as a valid claim. However, it is anticipated that the only activity expected on this claim would be the annual assessment work such as hand-sampling and extraction of very small amounts of jade (less than 100 pounds per year). This would disturb a maximum of 5 acres over time.

Livestock Grazing Management

The Split Rock WSA would continue to provide 1,141 AUMs for livestock use in portions of four grazing allotments. No new improvements are planned. The use of motorized vehicles to manage livestock would be precluded.

Recreation Management

The WSA would be managed to provide for only nonmotorized forms of recreation such as hunting, rock climbing, and backpacking. The WSA would be closed to all recreational off-road vehicle use.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreational facilities or trails exist in the WSA, and none are planned. It is estimated that there would be a slight (5%) increase in recreation use after designation. Projections indicate that recreation use would increase slightly to 1,575 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

SAVAGE PEAK

Proposed Action (No Wilderness)

Under the Proposed Action, the Savage Peak WSA would be recommended for nonwilderness uses. No special legislative protection would be given to any of the 7,041 acres of the Savage Peak WSA (See Map 5).

Oil, Gas and Other Minerals Management

The Savage Peak WSA would be open to oil and gas leasing. On the basis of current information, there is no potential for the occurrence of oil and gas in the WSA. Therefore, there is no likelihood of exploratory drilling. There are no oil and gas leases in the Savage Peak WSA. Under the Proposed Action, the WSA would continue to be open to mineral entry under the General Mining Law. Prospecting and exploration for locatable minerals in the WSA have been low to nonexistent. There are no mining claims in the WSA. Therefore, no exploration or development is expected in the foreseeable future.

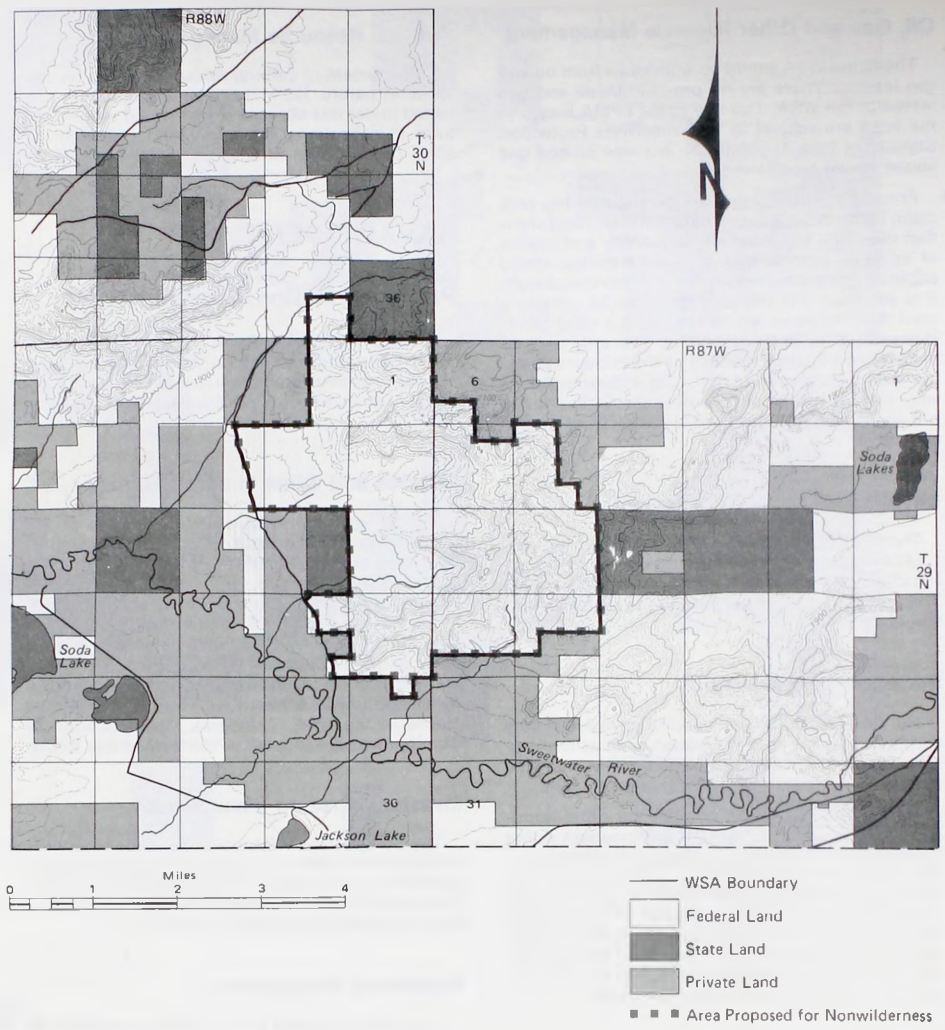
Livestock Grazing Management

The Savage Peak WSA would continue to provide 765 AUMs for livestock use in portions of three allotments. No new range improvements are planned. The use of motorized vehicles would continue for the purposes of livestock management.

Recreation Management

Under the Proposed Action, ORV travel would be limited to 1 mile of existing trails. Recreational ORV use of this WSA is estimated at 250 visitor days annually and would remain at this level for the next ten years.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (gen-



Map 5
Proposed Action (Nonwilderness)
Savage Peak

erally associated with hunting), photography, and sightseeing. No recreation facilities or trails exist in the WSA, and none are planned. Recreation use would remain below 1,000 visitor days for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under the Proposed Action that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

All Wilderness Alternative

Under the All Wilderness alternative, all 7,041 acres of the Savage Peak WSA would be recommended for designation as wilderness and would be given the special legislative protection afforded to designated wilderness.

Oil, Gas and Other Minerals Management

The entire WSA would be withdrawn from all forms of mineral entry and leasing. There are no oil and gas leases in the Savage Peak WSA. No new mineral leases would be allowed. As of 1988, there were no mining claims in this WSA; therefore, no activity is expected.

Livestock Grazing Management

The Savage Peak WSA would continue to provide 756 AUMs for livestock use in portions of three grazing allotments. No new range improvements are planned. The use of motorized vehicles to manage livestock would be eliminated.

Recreation Management

The WSA would be managed to provide for only nonmotorized forms of recreation such as hunting and backpacking. The WSA would be closed to all off-road vehicle use. One mile of two-track access would be closed.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. It is estimated that recreation use would increase slightly (5%) after designation. Projections indicate that recreational sue would increase slightly to 1,050 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

MILLER SPRINGS

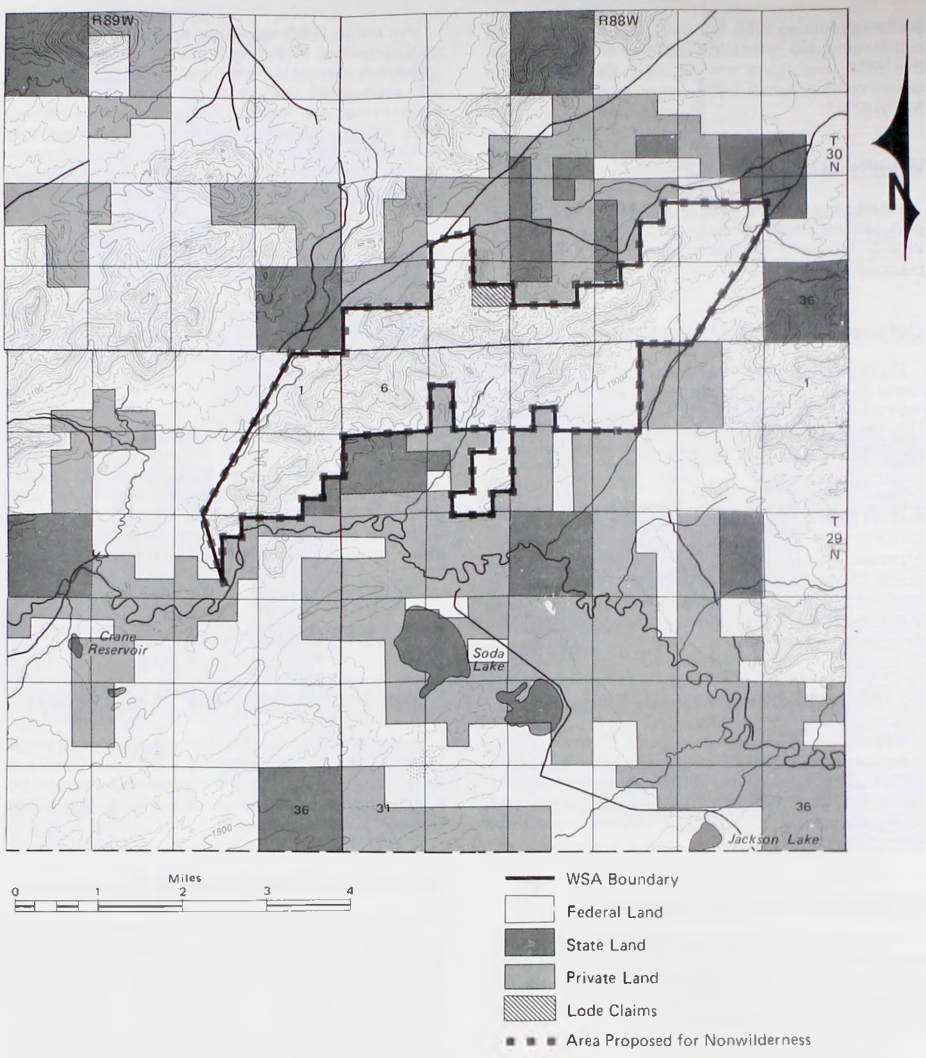
Proposed Action (No Wilderness)

Under the Proposed Action, the Miller Springs WSA would be recommended for nonwilderness uses. No special legislative protection would be given to the 6,429 acres comprising the Miller Springs WSA (See Map 6).

Oil, Gas and Other Minerals Management

The Miller Springs WSA would be open to oil and gas leasing. There are no oil and gas leases in the Miller Springs WSA. On the basis of current information, there is no potential for the occurrence of oil and gas in the WSA. Therefore, the likelihood of exploratory drilling is considered nil, and the anticipated use of the lands would not be expected to differ from past uses. Therefore, no exploratory drilling is anticipated.

Under the Proposed Action, the WSA would remain open to locatable mineral entry under the General Mining Law. Prospecting and exploration for other minerals in the WSA have been low to nonexistent, and no exploration or development is expected in the foreseeable future.



Map 6
Proposed Action (Nonwilderness)
Miller Springs

Livestock Grazing Management

The Miller Springs WSA would continue to provide 756 AUMs for livestock use in portions of two allotments. No new range improvements are planned. The use of motorized vehicles would continue for the purposes of livestock management.

Recreation Management

Under the Proposed Action, ORV travel would be limited to 2 miles of existing trails. Recreational ORV use of this WSA is estimated at 250 visitor days annually and would remain at this level for the next ten years.

The entire WSA would be open for recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. Recreation use is currently estimated to be 250 visitor days annually and would remain at this level for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under the Proposed Action that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

All Wilderness Alternative

Under the All Wilderness alternative, all 6,429 acres of the Miller Springs WSA would be recommended for designation as wilderness and would be given the special legislative protection afforded to designated wilderness.

Oil, Gas and Other Minerals Management

The entire WSA would be withdrawn from oil and gas leasing. There is no potential for the discovery of oil and gas. There are no oil and gas leases in the Miller Springs WSA, and no new leases would be allowed.

Prior to commencing work on the existing jade claim in the WSA, a validity examination must show that the claim holds sufficient quantity and quality of valuable jade that a prudent person could expect a reasonable return on his or her investment. It is assumed that the jade claim would contain a valid discovery and would thus remain as a valid discovery. The only activity expected on this claim would be the annual assessment work such as hand-sampling and extraction of very small amounts of jade (less than 100 pounds per year). This would disturb less than ten acres over the long term.

Livestock Grazing Management

The Miller Springs WSA would continue to provide 756 AUMs for livestock use in portions of two grazing allotments. No new range improvements are planned. The use of motorized vehicles to manage livestock would be eliminated.

Recreation Management

The WSA would be managed to provide for only nonmotorized forms of recreation such as hunting and backpacking. The WSA would be closed to all off-road vehicle use. Two miles of two-track access would be closed. Motorized forms of recreation would be excluded.

The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. It is estimated that recreation use would increase slightly (5%) after the designation. Projections indicate that recreation use would increase slightly to 265 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigations (inventory and evaluation of sites) or mitigation of adverse effects on sites.

COPPER MOUNTAIN

Proposed Action (No Wilderness)

Under the Proposed Action, none of the Copper Mountain WSA (6,858 acres) would be recommended for wilderness (see Map 7).

Oil, Gas and Other Minerals Management

All 6,858 acres of the Copper Mountain WSA would be open to oil and gas leasing under this alternative. On the basis of drilling history in the area and the high and moderate ratings for the potential for discovery of oil and gas resources, the development of a field with four wells within the WSA boundary is projected. The standard spacing acreage for this type of field would be 640 acres. Because of the rugged terrain and the increasing depth in lesser potentially productive formations to the north, development is projected only in the southern portion of the WSA. Approximately 40 acres of disturbance would be expected from a field of four wells.

Future oil and gas leases issued in the WSA would be conditioned with standard protection requirements, which are intended to protect watershed and wildlife values (see Stipulations 1 and 2, Appendix C).

Most of the WSA would be subject to application of the standard stipulation that does not allow surface-disturbing activities on slopes of more than 25%. Approximately 1,400 acres in the northern part of the WSA would be conditioned with seasonal restrictions on surface-disturbing activities from December 15 to April 15 so that crucial deer winter range would be protected.

The potential exists in the WSA for the discovery of chemical grade limestone and uranium deposits. However, the abundance of limestone elsewhere in the Lander Resource Area and the current poor market for uranium oxide lend little support to the development of these mineral resources in the foreseeable future. Therefore, no development is anticipated. Nevertheless, the WSA would be open to prospecting, exploration and mining.

There are five lode claims within the WSA along the western boundary and adjacent to the Wind River Reservation. Large-scale development of these claims is not expected. The only activity expected on these claims would be the necessary annual assessment work such as hand-sampling. This would disturb less than 10 acres over the long term.

Livestock Grazing Management

The Copper Mountain WSA would continue to provide 635 AUMs for livestock use in portions of two allotments. No new range improvements are planned. The use of motorized vehicles would continue for the purpose of livestock management.

Recreation Management

Under the Proposed Action, the area would be managed for dispersed recreation such as hunting and hiking. The public would continue to have access to the area, but only primitive camping would be available.

There are no vehicle trails in the WSA. The projected two miles of roads that would be associated with oil and gas exploration would allow access into the southern part of the WSA. ORV travel would be limited to these exploration roads. Even after construction of the roads, recreational ORV use would remain below 50 visitor days annually for the next ten years.

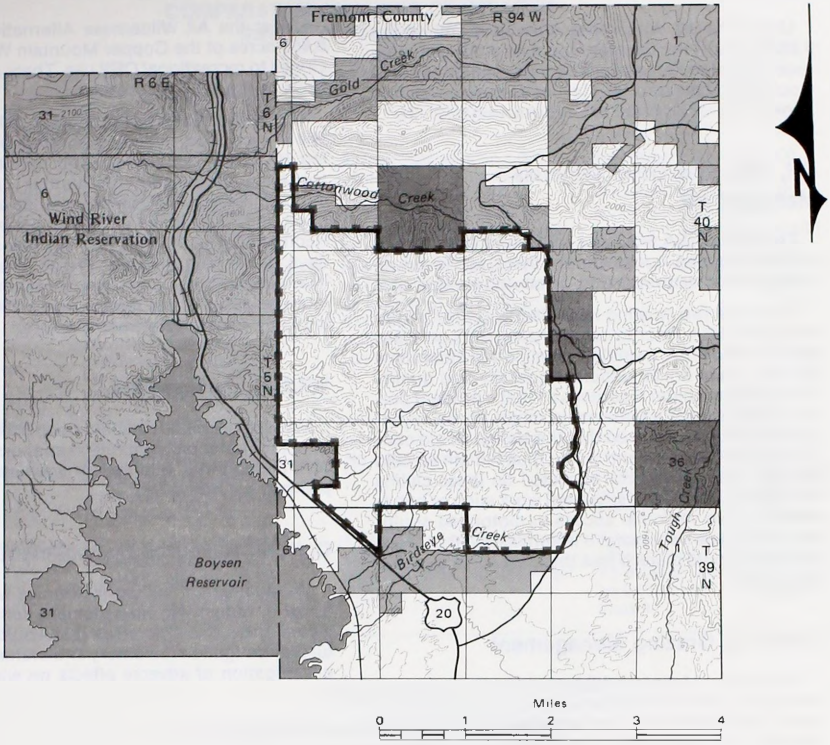
The entire WSA would be open for other recreation activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreation facilities or developed trails exist in the WSA, and none are planned. Recreation use would remain below 100 visitor days for the next ten years. Projections indicate that it is reasonable to expect that such use for these activities would increase slightly but remain below 200 visitor days annually for the next ten years.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Cultural resource investigations (inventory and evaluation of sites) would occur in conjunction with the development of the small oil and gas field projected under the Proposed Action. Overall, cultural resource investigations would occur on approximately 40 acres. Any sites or features found in the investigations would subsequently be avoided or adverse impacts would be mitigated by recordation and curation of the features. Beyond this area, management of cultural resources would be custodial in nature; no specific management actions are planned.



WSA Boundary

Federal Land

State Land

Private Land

Area Proposed for Nonwilderness

Map 7
Proposed Action (Nonwilderness)
Copper Mountain

All Wilderness Alternative

Under the All Wilderness Alternative, the entire 6,858 acres of the Copper Mountain WSA would be recommended for designation as wilderness and would be given the special legislative protection afforded to designated wilderness.

Oil, Gas, and Other Minerals Management

The entire WSA would be withdrawn from oil and gas leasing and consequently there would be no development or production of oil and natural gas.

There are five existing lode claims in the Copper Mountain WSA. Prior to commencing work on these claims in the WSA, a validity examination must show that the claim holds sufficient quantity and quality of valuable uranium resources so that a prudent person could expect a reasonable return on his or her investment. It is assumed that the claims would contain valid discoveries and would thus remain as valid claims. The only activity expected on these claims would be the annual assessment work such as hand-sampling. No vehicular access or motorized equipment would be necessary. It is anticipated that these activities would disturb less than ten acres over the long term.

Livestock Grazing Management

The Copper Mountain WSA would continue to provide 635 AUMs for livestock use in portions of two grazing allotments. No new range improvements are planned. The use of motorized vehicles to manage livestock would be eliminated.

Recreation Management

Under the All Wilderness Alternative, the entire 6,858 acres of the Copper Mountain WSA would be closed to recreational ORV use. There are no vehicle trails in the WSA at present.

The entire WSA would be open for other recreational activities, including hunting, horseback riding (generally associated with hunting), camping (generally associated with hunting), photography, and sightseeing. No recreational facilities or developed trails exist in the WSA, and none are planned. Recreational use would remain below 100 visitor days for the next ten years. Projections indicate that it is reasonable to expect that recreational use would increase slightly, but remain below 200 visitor days annually for the foreseeable future.

Wildlife Management

Monitoring wildlife habitat conditions and animal populations would continue in cooperation with the WGFD. No other wildlife management actions are planned for this WSA.

Cultural Resource Management

Management of cultural resources would be custodial in nature. No management actions are projected under this alternative that would require cultural investigation (inventory and evaluation of sites) or mitigation of adverse effects on sites.

TABLE 2A

COMPARATIVE ANALYSIS OF IMPACTS
Sweetwater Canyon WSA

Resource	Proposed Action (Partial Wilderness)	Alternative 1 (No Wilderness)	Alternative 2 (All Wilderness)
Wilderness Values	Assessment work on 1,000 acres of mining claims would disturb less than 10 acres over the long term. Impacts to naturalness would be negligible. Wilderness values enhanced on 5,538 acres due to elimination of ORVs; solitude and primitive recreation adversely affected by continued ORV use on 3,518 acres, but impact is minimal because ORV use levels are low.	Assessment work on 1,000 acres of mining claims would disturb less than 10 acres over the long term. Impacts to naturalness would be negligible. Solitude and primitive recreation would be adversely affected by continued ORV use on 9,056 acres, but impact is minimal because ORV use levels are low.	Assessment work on 1,000 acres of mining claims would disturb less than 10 acres over the long term. Impacts to naturalness would be negligible. Solitude and primitive recreation enhanced by elimination of ORV use.
Energy and Mineral Resources	A total of 5,538 acres closed to further mineral entry and leasing; 3,518 acres would be open to mineral entry and leasing. No significant impacts.	All 9,056 acres open to mineral entry and leasing. No significant impacts.	All 9,056 acres closed to further entry and leasing. Assessment work would continue on about 1,000 acres of existing claims. No significant impacts.
Recreation Resources	A total of 100 visitor days annually displaced from 2 miles of vehicle trail on 5,538 acres; no significant impact.	ORVs limited to approximately 3½ miles of existing trails on 9,056 acres. No significant impacts.	A total of 250 visitor days annually displaced from 3½ miles of vehicle trails on 9,056 acres; No significant impact.

TABLE 2B

COMPARATIVE ANALYSIS OF IMPACTS
Lankin Dome WSA

Resource Resource	Proposed Action (No Wilderness)	Alternative 1 (All Wilderness)
Wilderness Values	ORV use would adversely affect solitude and primitive recreation on less than 10% (less than 600 acres) of the WSA. Assessment work on jade claim would affect naturalness on less than 1% of the WSA. No significant impact.	Wilderness values protected on 6,316 acres. Assessment work would continue on existing mining claim; no impact on wilderness values.
Energy and Mineral Resources	All 6,316 acres open to mineral entry and leasing; assessment work would continue on one jade claim. No significant impact.	All 6,316 acres closed to mineral entry or leasing. Assessment work would continue on one jade claim. No significant impact.
Local Ranching Operations	No increased conflict or impact is expected. No impact on ranching operations.	20% increase (from 50 to 60) in contacts between public and landowners would result in increased disruption of local ranching operations.

TABLE 2C

COMPARATIVE ANALYSIS OF IMPACTS
Split Rock WSA

Resource Resource	Proposed Action (No Wilderness)	Alternative 1 (All Wilderness)
Wilderness Values	ORV use would adversely affect solitude and primitive recreation on less than 10% (less than 1,200 acres) of the WSA. Assessment work on jade claim would affect naturalness on less than 1% of the WSA. No significant impact.	Wilderness values protected on 12,780 acres. Assessment work would continue on existing mining claim; no impact on wilderness values
Energy and Mineral Resources	All 12,789 acres open to mineral entry and leasing; assessment work would continue on one existing jade claim. No significant impact.	All 12,789 acres closed to mineral entry and leasing. Assessment work would continue on one jade claim. No significant impact.
Local Ranching Operations	No increased conflict or impact is expected. No impact on ranching operations.	30% increase (from 50 to 65) in contacts between public and landowners would result in increased disruption of local ranching operations.

TABLE 2D

COMPARATIVE ANALYSIS OF IMPACTS
Savage Peak WSA

Resource Resource	Proposed Action (No Wilderness)	Alternative 1 (All Wilderness)
Wilderness Values	ORV use would adversely affect solitude and primitive recreation on less than 10% (less than 700 acres) of the WSA. No significant impact.	Wilderness values protected on 7,041 acres.
Energy and Mineral Resources	All 7,041 acres open to mineral entry and leasing; no significant impact.	All 7,041 acres closed to mineral entry and leasing. No significant impact.
Local Ranching Operations	No increased conflict or impact is expected. No impact on ranching operations.	25% increase (From 40 to 50) in contacts between public and landowners would result in increased disruption of local ranching operations.

TABLE 2E

COMPARATIVE ANALYSIS OF IMPACTS
Miller Spring WSA

Resource Resource	Proposed Action (No Wilderness)	Alternative 1 (All Wilderness)
Wilderness Values	ORV use would adversely affect solitude and primitive recreation on less than 10% (less than 600 acres) of the WSA.	Wilderness values protected on 6,429 acres. No significant impact.
Energy and Mineral Resources	All 6,429 acres open to mineral entry and leasing. No significant impact.	All 6,429 acres closed to mineral entry and leasing. No significant impact.
Local Ranching Operations	No increased conflict or impact is expected. No impact on ranching operation.	13% increase (from 40 to 45) in contacts between public and landowners would result in increased disruption of local ranching operations.

TABLE 2F

COMPARATIVE ANALYSIS OF IMPACTS
Copper Mountain WSA

Resource Resource	Proposed Action (No Wilderness)	Alternative 1 (All Wilderness)
Wilderness Values	Loss of naturalness, solitude and primitive recreation would occur on 840 acres through oil and gas exploration and development. Assessment work would continue on existing claims; no impacts on wilderness values.	Wilderness values protected on 6,858 acres. Assessment work would continue on existing mining claims; no impacts on wilderness values.
Energy and Mineral Resources	All 6,858 acres open to mineral entry and leasing. No impact.	All 6,858 acres closed to mineral entry and leasing. Projected oil field development would not occur. This is considered to be a significant impact.
Recreation Resources	ORVs limited to 2 miles of roads and trails constructed for mineral exploration; no significant impact.	All 6,858 acres closed to ORVs; no impact because no ORV use is occurring now.

CHAPTER 3

AFFECTED ENVIRONMENT

UNAFFECTED COMPONENTS OF THE EXISTING ENVIRONMENT

There are several components of the existing environment within the six WSAs described in this EIS that would be unaffected by the proposed action or any of the alternatives. These are briefly discussed below.

None of the six WSAs contain commercial forest land. Air quality and soils in all of the WSAs would be unaffected by any alternative. Vegetation and riparian areas would be unaffected by either designation or nondesignation of any of the WSAs as wilderness because the main activity affecting vegetation and riparian areas (livestock grazing) is not expected to change.

Water quality in the Sweetwater Canyon WSA (including the Sweetwater River and its tributaries) is expected to remain the same, with or without wilderness designation. None of the anticipated management actions described in Chapter 2 are expected to alter the present quality of water resources in the river or its tributaries because the actions would either occur outside the area of influence or would be small scale activities with a short duration.

Water resources in the Sweetwater Rocks WSA complex are limited to small springs and seeps. There are no lakes or perennial streams in these four WSAs. Because anticipated management actions are either already occurring or would be small-scale, water quality within these four WSAs would remain unchanged regardless of wilderness designation or nondesignation. Because there are no lakes or streams, there are no fisheries in the Sweetwater Rocks WSA complex.

For more information on these topics the reader is referred to Chapter 3 of the Lander Resource Management Plan (1986).

AFFECTED ENVIRONMENT

Sweetwater Canyon

General Characteristics

Sweetwater Canyon is located in Fremont County, Wyoming, approximately 15 miles east of South Pass City on the Sweetwater River. Map 1 (Chapter 1, location map) shows the wilderness study area location in relation to cities and towns and other major features of Fremont County.

Access to the WSA during summer from either side of the canyon is by unimproved two-track trails or ways, some of which cross private lands. These vehicle routes run into the BLM Hudson-Atlantic City road, Wyoming Highway 28 at South Pass, and U.S. Highway 287 on Beaver Rim. During most of the winter, the WSA is inaccessible by any of these roads because of drifted snow.

Sweetwater Canyon lies along the southeastern flank of the Wind River Range in the high plains desert. The WSA begins on the west near Wilson Bar, at an elevation of 7,150 feet. It ends on the east near Spring Creek and Chimney Creek at an elevation of 6,720 feet. The river drops 430 feet, or about 45 feet per mile, as it passes through the WSA.

Wilderness Values

Size

The Sweetwater Canyon WSA contains 9,056 acres of public land. No private or state inholdings and no split-estate lands are located within the WSA boundary. The boundary is defined by roads and by state and private lands.

Naturalness

Human influence is not substantially noticeable. This is particularly true in the river canyon itself. The only intrusions are two-track trails (Map 2, Chapter 2) and an abandoned mineral exploration site near the river at the western edge of the WSA.

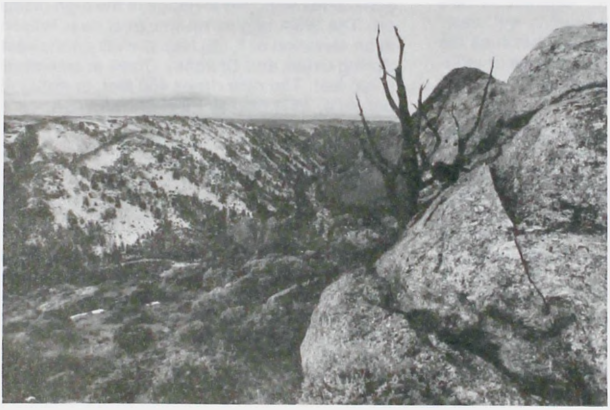
There are two basic types of topography in the WSA: the canyon and its tributary draws, and the gently rolling hills that surround the canyon. The canyon, which is 6-7 miles long, is a water-carved gorge nearly 500 feet deep. In places, the walls are almost vertical. Bare rock outcrops exist throughout the gorge. Outcrops along the canyon walls are interspersed with sagebrush, grasses, other shrubs, and pockets of aspen and willow, all of which provide considerable variety in the landscape (photos 1 and 2). Vegetation in the bottom of the gorge and along the river tributaries consists of willow, limber pine, aspen, cottonwoods, and juniper. The topography and vegetation are unique relative to the surroundings. The contrast between the WSA and surrounding hills is abrupt and striking. The terrain above the gorge is mostly flat with low, gently rolling hills and a few moderately scattered rock outcrops.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

The river canyon, coupled with dense riparian vegetation and numerous tributary draws, provides a high degree of solitude. The canyon follows the meanders of the Sweetwater River, creating numerous secluded places for camping or other recreational activities. The vegetation along the floor of the canyon and the topography of the canyon screen visitors from one another.

There are no developed recreational sites in or adjacent to the WSA. A limited amount of camping and picnicking takes place via four-wheel drive access routes. Use is concentrated at both ends of the canyon (Wilson Bar and Chimney creeks) and in the center of the canyon near Strawberry Creek. Visitors hike and backpack during the summer, but levels of use are low.

The river offers high-quality brown and rainbow trout fishing. The Wyoming Game and Fish Department (WGFD) has classified the river as an important trout water of regional importance. This high-quality fishing opportunity attracts recreationists from Wyoming and the neighboring states of Colorado and Utah. One commercial fishing outfitter has operated in the canyon.



Photograph 1: Sweetwater Canyon in late fall

Photograph 2: Sweetwater Canyon, looking downstream to the east.

According to visitor counts and traffic counter readings, the WSA receives its heaviest use during the fall hunting seasons and during the summer weekends. BLM recreation specialists estimated use at about 1,500 visitor days in the canyon during 1977. However, use has declined since the population of nearby Jeffrey City has dropped from an estimated 4,000 people to less than 500 because of the cessation of uranium mining. Visitor use is estimated to have stabilized at approximately 1,000 days annually.

Mule deer are hunted within the canyon. The principal small game species is the cottontail rabbit. Sage grouse are also hunted, and antelope are hunted on the flat, rolling areas above the canyon.

Of all the opportunities for recreation, the river itself is by far the most important. Typically, fishing opportunities attract visitors to the area. While fishing, visitors usually take advantage of other benefits such as the outstanding solitude, scenery, and camping opportunities along the river.

Special Features

The canyon has high scenic values, including the feeling of uncluttered, open space, isolation, and peacefulness.

The Sweetwater Canyon WSA has outstanding wilderness values. It contrasts sharply with the color and texture of the surrounding desert environment, adding bright green and blue hues to the landscape in summer and blue, gold, and brown in the fall. Steep rock walls also contrast with the nearby smooth, rolling hills.

Geology and Mineralization

The following sections were developed utilizing information published in the U.S. Geological Survey (USGS) Bulletin 1757-D, *Mineral Resources of the Sweetwater Canyon Wilderness Study Area, Fremont County, Wyoming* (USGS, 1988). This bulletin was prepared and the Wyoming Geological Survey and describes the results of mineral resource surveys conducted during the summer of 1986. The bulletin contains detailed descriptions of the geology, mining history, mineral resources, and potential for undiscovered mineral resources within the WSA. An appraisal of known mineral occurrences was made by the Bureau of Mines, and an assessment of the potential for undiscovered mineral resources was made by the USGS.

Geology

The Sweetwater Canyon WSA lies along the southeastern flank of the Wind River Range. The Wind River Range was uplifted during the Laramide Orogeny, which began in late Cretaceous time (see Appendix D).

Most of the WSA contains Precambrian metamorphosed sedimentary and granitic rocks as the surface bedrock unit. The Tertiary South Pass Formation overlies these Precambrian rocks in a few isolated areas. The Precambrian rocks outcrop in the eastern 75% of the WSA and consist mainly of pink and gray unaltered granite. A greenstone belt of Precambrian metasediments outcrop in the western third of the WSA consists of biotite-chlorite schists, garnet schists, and microcrystalline horn-

fels intruded by mafic dikes. These metasediments are deformed and sheared in a north to northwest trend (USDI, BLM 1976; USDI, GS 1988).

The Tertiary South Pass Formation consists of conglomerates and sandstones cemented with volcanic ash and some beds of volcanic ash (USDI, GS 1974).

Tertiary alluvium and colluvium deposits are scattered throughout the area. The alluvium consists of boulders, gravel, sand, silt, and clay deposited by the Sweetwater River and its tributaries.

Mineralization

The Lewiston Mining District, which was organized in 1879, includes a grouping of gold mines northeast of the head of the Sweetwater Canyon WSA. Placer gold was discovered along Strawberry Creek in 1842, and gold mining began in earnest in 1867 with the discovery of the Carissa Lode near South Pass City located about 10 miles west of the Lewiston Mining District. Many discoveries followed, but the mining boom was short-lived and most of the mines in all mining districts were shut down by 1895. Intermittent gold production continued until 1956, when the Duncan Mine between South Pass City and Atlantic City was closed (USDI, BLM 1976). There is no accurate record of the amount of gold produced from mining districts of South Pass and Lewiston.

In the Lewiston Mining District the lode gold is found in quartz veins associated with hydrothermally altered metasediments which contain silver, copper, arsenic, and tungsten. The placer gold is associated with medium to coarse grained Quaternary gravels primarily confined to drainage bottoms. A gold dredging operation took place at Wilson Bar just upstream from the WSA, but it closed in 1943 (USDI, BLM 1976).

The USGS (1988) noted that "In the extreme northwestern part of the WSA, the greenstone belt contains narrow gold-bearing quartz veins occurring in faults in graywacke of the Miners Delight Formation. Identified gold resources are present in these rocks outside the study area. Topographic projection of, and analytical data for the exposed part of the veins, suggest that subsurface continuity of the veins is possible." The USGS and Bureau of Mines concluded that small to moderate tonnage (less than 20,000 short tons) of gold-bearing vein rock might be present within the WSA.

The USGS (1988) concluded that placer gold occurs in the gravels of the Sweetwater River in the WSA. Bedrock gold concentrations and potential pay streaks of gold in the Sweetwater River could exist but because of the low gold concentrations of the gravel, no resource volumes were identified. Subeconomic quantities of sand and gravel and granitic dimension stone occur within the WSA but the vast quantities of these salable mineral commodities elsewhere in the region make these resources unattractive for exploitation. In the past three years, the BLM has reviewed several notices for exploration operations in the Lewiston area; however, no plans of operations have been reviewed, denied, or approved for mining within the WSA.

The USGS and Bureau of Mines (1988) concluded for all studies within the WSA that there exists a high mineral potential for undiscovered lode-gold resources in the greenstone rocks that underlie the western side of the WSA. A high mineral resource potential for undiscovered placer gold has been assigned to the gravels along the banks and streambed of the Sweetwater River and along Strawberry Creek. Visible gold was detected in panned concentrates along the entire length of the river in the WSA, but the gold concentrations were determined uneconomic at gold prices of $400 per troy ounce.

During 1974 the Atomic Energy Commission conducted an airborne radiometric survey that identified some small anomalous areas near Sweetwater Canyon. The Precambrian granitic rocks have been intruded by pegmatites that are considered moderately favorable for the occurrence of uranium and thorium (Tetra Tech 1983). The base of the Flathead Formation in the extreme eastern end of the WSA has a low favorability for the occurrence of uranium (Tetra Tech 1983). During field work conducted by Tetra Tech, Inc., in 1983, a small radiometric anomaly with measurements twice as high as the background count was identified in the lower 40 feet of the Flathead Formation along the eastern edge of the WSA. This anomaly may guide any future exploration. The USGS (1988) gave the WSA a low mineral resource potential for undiscovered uranium because no evidence of possible uranium deposits were observed in the WSA.

Nephrite jade has been reported in the vicinity of the WSA near amphibolite rocks. No commercial quantities of jade have been reported in the vicinity of the WSA. The USGS (1988) did not report any finding of jade occurrences within the WSA.

According to the USGS (1983) there is no potential for oil and gas accumulation in this WSA. The USGS (1988) concluded that the study area has no recognized energy resource potential for oil and gas because of the Precambrian crystalline rocks which underlie it. There are no oil and gas leases within the WSA.

Tungsten, in the form of sheelite, was found in the Burr Mine about 1½ miles west of the WSA. The sheelite was found associated with quartz veins and hematiferous schists (Wilson, 1951). The USGS (1988) reported anomalous concentrations of tin

and tungsten in the Sweetwater River gravels and the tributaries of the river. A low resource potential has been assigned for tin and tungsten in placer-type deposits in the Quaternary gravels along the Sweetwater River and Strawberry Creek. A low resource potential for undiscovered tin and tungsten in lode-type deposits has been assigned to the entire WSA.

Map 8 shows the mineral resource potential of the Sweetwater Canyon WSA. This map was adapted from a similar map in the USGS Bulletin 1757-D. Map 9 illustrates the approximate locations of mining claims within the Sweetwater Canyon WSA.

Livestock Grazing

Twelve operators graze livestock within the boundaries of the Sweetwater Canyon WSA. The majority of the area is used for grazing cattle, although sheep occasionally use the southeast portion of the WSA. Livestock graze in most of the WSA, except for the steep canyon walls. Cattle tend to concentrate along the river and its associated riparian zone. Livestock grazing occurs from May through December on the portion south of the river.

There are no structural range improvements in the WSA. Herding of livestock has been done by horseback and four-wheel drive vehicle on the existing two-track trails that cross the interior of the WSA.

There are two grazing allotments in the area that are made up in part by lands in the Sweetwater Canyon WSA. Only a small portion of each allotment (in terms of both acreage and livestock forage) is contained within the boundaries of the WSA. The current erosion condition class is rated as slight overall. Erosion problems are limited to isolated disturbed sites such as two-track trails.

Table 3 lists and describes the grazing allotments, including a breakdown of federal acreage and animal unit months in the WSA and in the allotments as a whole. Map 10 shows the two allotments in the WSA.

Recreation

The Sweetwater Canyon provides a variety of recreational activities, including fishing, hunting, sightseeing, hiking, camping, and historic trail use. Use, primarily by local residents, is largely dispersed. In the canyon, the Sweetwater River provides high-quality trout fishing. Many of the 1,000 annual estimated visitor days are attributable to fishing and occur during June, July, and August. Sweetwater Fishing Expeditions, a commercial guide service, has been issued a special recreation-use permit for the area in past years. The area receives hunting use in the fall; antelope, mule deer, and sage grouse are the principal game species hunted. Sightseeing and camping use are largely associated with other recreational activities. Recreational ORV use is estimated to be approximately 250 visitor days per year. This use is generally associated with, or in support of, other recreation activities.

There are two vehicle access points to the river in or along the boundary of the WSA, the Wilson Bar area on the north end, Chimney Creek on the south, and Strawberry Creek in the center of the canyon (see Map 2). The access routes to Wilson Bar and Chimney Creek actually lie outside of the WSA. The more remote canyon areas are accessible only by foot or horseback from those starting points. ORV use problems have occurred in these areas, and minor trail closures have been initiated on trails that have been damaged. ORV designations completed in 1981 limit use to approximately 3½ miles of existing two-track trails and vehicular routes. Except for the Strawberry Creek crossing, most ORV use within the WSA remains above the canyon rim.

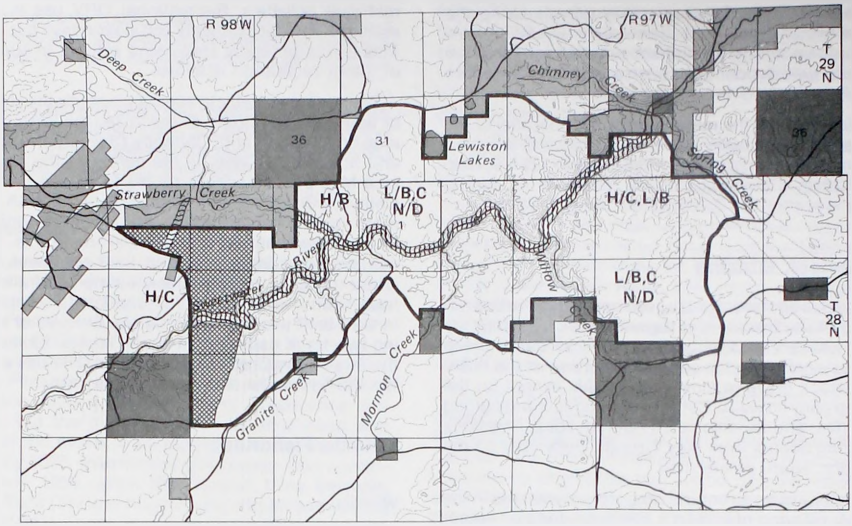
Wildlife/Fisheries

Wildlife

Sweetwater Canyon contains a diverse mixture of vegetation that provides a variety of habitat types for several wildlife species. Along the top of the canyon rim and on the south-facing canyon slopes, the sagebrush/grass community is the dominant habitat type. On the north facing slopes and in the deepest part of the canyon, small stands of limber pine, lodgepole pine, and aspen provide structural diversity that increase the number of reproduction, feeding, and hiding sites for wildlife. The riparian vegetation, which roughly parallels the river, consists of such water-loving species as willow, water birch, and cottonwood.

Sweetwater Canyon is crucial winter range for moose. Heavy accumulations of snow in the Wind River Range cause moose to move out of the mountains and feed on the willow stands along the Sweetwater River and its tributaries. Under extremely severe winter conditions, elk move off their normal winter range on the upper Sweetwater and Oregon Buttes country into the Sweetwater Canyon. Consequently, the WSA is classified as severe winter relief range for elk.

The WSA is yearlong range for mule deer. The wet meadows provide important summer forage, and the numerous shrub species provide winter browse. Deer use the pockets of aspen and conifer as bedding sites. These pockets also provide hiding cover and shade from the hot summer sun.



(Source - Mineral Resources of the Sweetwater Canyon Wilderness Study Area, Fremont County, Wyoming. U.S. Geological Survey Bulletin 1757-D, 1988.)

WSA Boundary

Federal Land

State Land

Private Land

Identified lode - gold resource

H/C — Geologic terrane having high mineral resource potential for lode gold of Precambrian age, with certainty level C

H/B — Geologic terrane having high mineral resource potential for placer gold of Quaternary age, with certainty level B

H/C L/B — Geologic terrane having high mineral resource potential for placer gold of Quaternary age, with certainty level C, and low mineral resource potential for placer tin and tungsten of Quaternary age, with certainty level B

L/B,C — Geologic terrane having low mineral resource potential for lode tin and tungsten (in Precambrian rocks), with certainty level B, and uranium, with certainty level C -- Applies to entire study area

N/D — Geologic terrane having no resource potential for oil, gas, or geothermal energy, with certainty level D -- Applies

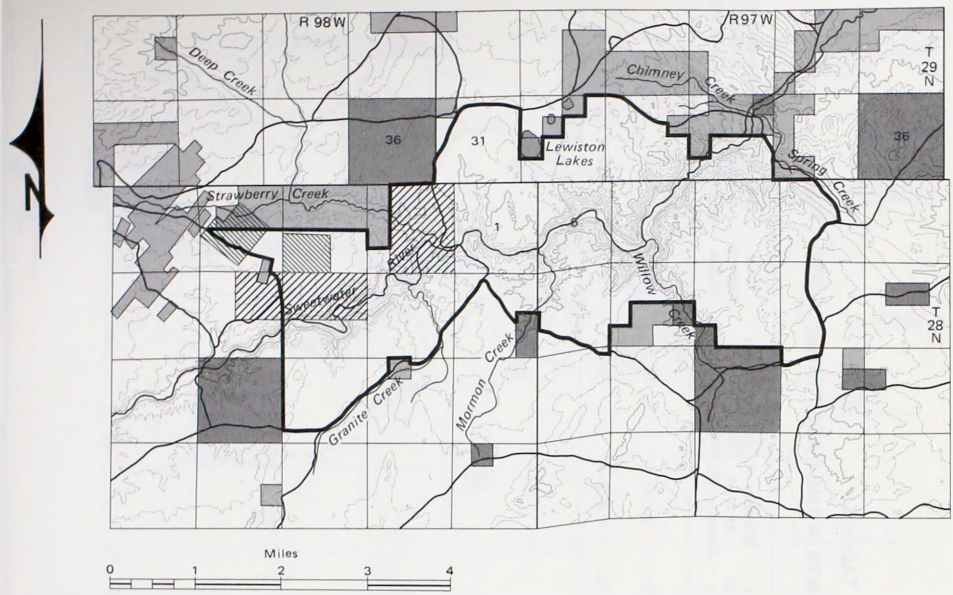
Certainty levels

B — Available information suggests the level of mineral resource potential

C — Available information gives a good indication of level of resource potential

D — Available information clearly defines the level of mineral resource potential

Map 8
Mineral Resource Potential
Sweetwater Canyon

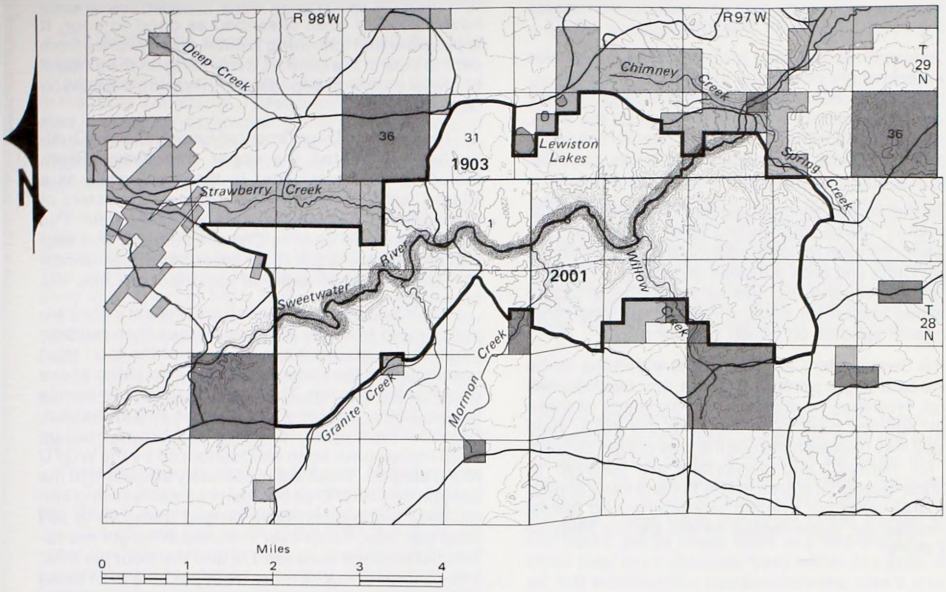


Map 9
Mining Claims
Sweetwater Canyon

TABLE 3

LIVESTOCK GRAZING ALLOTMENTS IN THE SWEETWATER CANYON WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1903	Silver Creek Common	Spring-Summer Fall 5/15-9/30	Cattle	31,953	3,830	12	3,552	426	2
2001	Green Mountain Common	Spring-Summer-Fall 5/1-12/31	Cattle, Sheep	468,379	5,226	1	47,729	533	1



WSA Boundary

Federal Land

State Land

Private Land

River· Allotment Boundary

1903 Silver Creek Common

2001 Green Mountain Common

Map 10
Grazing Allotments
Sweetwater Canyon

Antelope inhabit the sagebrush/grass habitat along the canyon rim and south facing slopes during the summer. Springs and seeps throughout the canyon provide drinking water during the summer. Most of the pronghorn that use the canyon migrate to the south or east for the winter.

Cottontail rabbits, sage grouse, and many species of waterfowl are numerous throughout the canyon. Occasionally chukar-partridge and blue grouse are present. Beavers are common throughout the WSA. Many of the tributaries to the Sweetwater River contain beaver dams and lodges. Red foxes, coyotes, bobcats, and muskrats also inhabit the WSA.

Golden eagles, ferruginous hawks, prairie falcons, red-tailed hawks, and several other species of raptors are common residents during the summer in the WSA. Cliffs and rock outcrops provide suitable raptor nest sites, and the diverse vegetative structure provides habitat for mice, shrews, voles, and other nongame species on which raptors prey.

The Sweetwater Canyon WSA is within the range of the bald eagle, peregrine falcon, and black-footed ferret. However, no documented sightings of these three species have been made in the WSA. Bald eagles may occasionally use the area during the winter for hunting, and peregrines are believed to migrate through the area in late fall and early spring. The area does not contain any prairie dog towns; consequently, black-footed ferrets are not likely to live there.

Fisheries

A major recreational attraction of Sweetwater Canyon is the fishery. Rainbow, brown, and brook trout are present in the Sweetwater River and in two tributary creeks in the study area. Trout are not stocked in the canyon area.

The stream is described by WGFD as one of considerable natural beauty; the type that is favored by tourists. Vehicular access is fairly good (there is one road to the river at Strawberry Creek and several roads to the canyon edge), and streambank vegetation does not restrict use by fishermen. The river is not floatable during fishing season (July through October). The Sweetwater River is not large in the canyon (about 40 feet wide), but it is moderately productive.

Sweetwater Canyon contains the most important BLM-administered trout fishing in the Lander Resource Area.

There are about 10 miles of brown and rainbow trout habitat in the study area (Sweetwater River) and 2 miles of brook trout habitat (tributaries). Habitat in the canyon part of the Sweetwater River, as shown by fish sampling and habitat surveys, is better than that found in adjacent portions of the Sweetwater River Stream gradient is steeper, large boulders are present, streambanks are mostly stable, and the quality and frequency of pools is near optimum for this type of stream. Spawning gravels have variously been described as good to poor. It is possible that spawning habitat quality varies from year to year in the canyon, depending on the amount of gravel entering, deposited and leaving the canyon each year.

The Wyoming Department of Environmental Quality has designated the upper Sweetwater River, including the Sweetwater in the study area, as a Class I water; a designation reserved for waters of the highest quality and importance to the state. The WGFD Stream Fisheries Classification for this section of the Sweetwater River describes it as an important trout water of regional importance (Class III).

Both trout and nongame fish are present in the canyon. Brown trout are more numerous than rainbow trout, but rainbows make up more of the total trout population in the canyon than they do either above or below the canyon. This may indicate a preference for bouldery, pocket-water type of stream habitat. Rainbow trout up to 16 inches and brown trout up to 20 inches have been electoshocked by the WGFD in the canyon. Trout are moderately abundant in the canyon and WGFD population estimates (using single pass techniques) have ranged from 229 to 960 trout per mile. Trout over 7 inches in length are estimated to range between 176 and 295 trout per mile. The canyon contains more trout per mile than those sections of the Sweetwater River above or below the canyon.

Nongame fish present in the canyon are longnose, white and mountain suckers; lake chubs; creek chubs; longnose dace; Iowa darters; and carp. These fish are not abundant.

Trout reproduction in the canyon is favored by mild winters and log spring runoff. Years of harsh winter and heavy spring flooding reduce reproductive success and numbers of larger trout present in the canyon.

Cultural Resources

A search of the files of the cultural resources in the Sweetwater Canyon WSA was conducted. During a low-intensity reconnaissance inventory in 1975, a number of topographic features in the WSA were sampled by a BLM archeologist. Thirteen prehistoric sites were identified that were believed to be one-time occupation sites that had been used for a very short period. No information is available as to the age or significance of the sites. The inventory indicated that a good probability exists for finding additional sites.

Local individuals have also reported a small site along the river floodplain that consists of several stone circles. These stone circles are commonly thought to be the result of Native American campsites where teepees were used for shelter.

The prehistoric people who occupied the area were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time in any one location. A particular cultural site might represent a one-time use of a location, or repeated use over thousands of years.

Historic period resources also occur in the Sweetwater Canyon WSA. One site located along the Sweetwater River is listed on the National Register. This site was used by Jedediah Smith and his company of trappers in 1824. They were headed toward the Green River for that spring's trapping, but a severe storm prevented the party from crossing South Pass. Instead, the trappers turned eastward and found shelter in a grove of aspen in the canyon. They stayed at this site for 2-3 weeks until the weather cleared. The site is now withdrawn from all forms of mineral entry and leasing.

The Oregon and Mormon Pioneer National Historic Trails form a part of the northern boundary of the WSA. A major cut-off route of the trail, the Seminoe Cut-off, ran just south of the WSA but does not enter the WSA. Historic uses of the trails included emigrant transportation, military protection and transportation, the Pony Express, the early Overland Stage Line and Telegraph, and early mining and livestock transportation. This major corridor was used by thousands of people during the westward expansion and gold rush days to traverse the Sweetwater Valley and the Continental Divide at South Pass.

Exploration for gold in the general vicinity began in 1842 with the discovery of placer gold along Strawberry Creek. Later gold exploration at nearby Lewiston in the 1800s was extensive and resulted in several large operations. However, there is no record of any gold ever having been placer-mined from within the WSA itself.

Lankin Dome

General Characteristics

The topography of the Lankin Dome WSA is in two basic forms: the uplifted mountains of reddish granite rocks, slabs, and exfoliating domes and the flats of Nolen Pocket north and west of the rocks. Elevations in the area range from about 6,200 feet at the western boundary road to about 7,700 feet on Lankin Dome.

Vegetation varies directly with the two landforms. The rocks support little vegetation; however, the drainages among them support fairly dense "pockets" of limber pine, juniper, aspen, and sagebrush. These scenic green areas contrast sharply with the reddish granite.

Wilderness Values

Size

The unit has 6,316 acres of contiguous public land; this includes 360 acres of split-estate land on which only the surface is federally owned, not the minerals. The unit is bordered on the north by private and federal lands and a road, on the west by a county road that provides the only public access, on the south by private lands, and on the east by state, federal, and private lands and a road.

Naturalness

Four two-tracked vehicle ways and two fence lines penetrate the unit. Both fences run from the west to the base of the rocks. A primitive way runs in from the west to a small pocket; however, because of topography, it has minimal effect upon the rest of the area. Three ways penetrate Nolen Pocket from the north. All of these ways are two-tracked, and while they are noticeable from within the area, they do not significantly compromise the area's overall naturalness. These ways could be rehabilitated with the use of hand tools and weathering associated with time.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

Because of the WSA's topography and vegetation, solitude is readily available. The draws in the unit are generally small, as are the pockets along its perimeter. Campsites and hiking routes, while scenic, are not secluded from the surroundings. A large degree of visitor overlap would occur.

The opportunity for solitude exists, but it is not outstanding since the area that provides topographic and vegetative screening to the visitor is small and would be somewhat confining. The pockets along the base do not provide the seclusion necessary to make the area outstanding.

The unit offers outstanding opportunities for a primitive and unconfined type of recreation—rock climbing, hiking, backpacking, and hunting. Cracks in the granite allow entry for water, which produces springs and seeps that provide a limited amount of potable water.

Lankin Dome (photo 3), the most prominent feature of the unit, has long been an attraction to rock climbers. Its history of rock climbing is documented back to the 1950s. The dome has been featured in national magazines such as *Summit*. As seen from the east, Lankin Dome is somewhat reminiscent of Devils Tower, a national monument in northeast Wyoming.

Backpacking to one of the wooded "pockets" would be one of the recreational activities available. Hunting for antelope is outstanding on the flats because game is abundant and packing distances are short. Opportunities for bird watching also are outstanding.

Special Features

The area is exceptionally scenic, with the reddish granite boulders, slabs, and exfoliating domes contrasting significantly with the greens of the wooded pockets. These large expanses of barren granite, which are not found elsewhere in central Wyoming, form a natural and highly scenic backdrop for the Sweetwater River Valley, an area that played an important role in the history of the exploration and early settlement of the West.

Livestock Grazing

The WSA currently provides 373 AUMs for livestock grazing in portions of five allotments. Table 6 lists details of the five grazing allotments in the Lankin Dome WSA, and Map 11 shows the locations of the allotments. All of the grazing use is by cattle. The Green Mountain rangeland program summary (USDI, BLM 1983a) contains a detailed description of livestock grazing management.

Geology and Mineralization

Geology

The Lankin Dome WSA is within the Granite Mountain Uplift, which is part of a large east-west trending uplift that separates the greater Green River Basin to the south from the Wind River Basin on the north. The Granite Mountains generally have been a structural high since earliest Paleocene time (see appendix D), although the area has undergone repeated structural adjustment since that time. During Miocene and Pliocene times, portions of the area were topographically low and were the sites of deposition.

Photograph 3: Lankin Dome, a large granite monolith, is one of the most spectacular features of the Granite Mountains.

The predominant bedrock units exposed in the Lankin Dome WSA are a medium to coarse grained biotite granite and a granitic gneiss (Tetra Tech 1983). These Precambrian granites and gneisses outcrop in the central parts of the WSA and contain intrusive dikes of basalt and pegmatites.

During Miocene time, the Split Rock Formation was deposited in the topographically low, probably undrained, portions of the Granite Mountains. The Split Rock Formation is generally less than 1,000 feet thick and consists of white to tan, fine to coarse grained sandstones and conglomerates (USDI, GS 1970). During Pliocene time, the Moonstone Formation was deposited in many of the same areas and is now found overlying the Split Rock Formation. The Moonstone reaches a maximum thickness of 1,350 feet and consists of interlayered sandstones, limestones, tuffs, conglomerates, and claystones (USDI, GS 1970). The Split Rock and Moonstone Formations surround the Precambrian core and are exposed in outcrops on the fringes of the WSA.

Mineralization

According to USGS (1983), there is no potential for oil and gas accumulation in this WSA.

The area surrounding the WSA contains occurrences of uranium, thorium, pumicite, sodium carbonate-sulfate, vermiculite, zeolites, and jade.

The uranium and thorium occurrences are associated with pegmatites in the Precambrian rocks and with the Tertiary sedimentary rocks of the Split Rock and Moonstone formations. Occurrences of uranium and thorium in pegmatite dikes are probably very restricted and have low potential for development.

Uranium occurrences in the Split Rock Formation appear small and localized, and little source material (volcanic ash) is present in the formation (USDI, GS 1970). For these reasons, this formation has a low to moderate favorability for the occurrence of uranium. The Moonstone Formation has widespread uraniferous beds and contains more volcanic tuff beds, which could serve as a source of uranium (USDI, GS 1970). For these reasons, the Moonstone Formation has a moderate to high favorability for the occurrence of uranium.

The pumicite occurrences within and near the WSA are small, and are believed to have a low potential for development.

Some lakes occupying depressions in the exposed Split Rock Formation contain sodium carbonates and sodium sulfates; however, there are no known soda lakes within the WSA.

Jade occurs in veins or dikes in the Precambrian rock or as place concentrations in the Tertiary sediments (Tetra Tech 1983). There is one jade mine adjacent to the WSA that has been worked in recent years (NW¼SE¼, Section 3, T. 29 N., R. 90 W., 6th P.M.). The WSA has a moderate to high favorability for the occurrence of jade.

The Tertiary Moonstone and Wagon Bed formations contain zeolite minerals in certain locations near the WSA. Phillipsite is found near the top of the type section of the Moonstone Formation in Section 17, T. 30 N., R. 89 W., 6th P.M. (about 2 miles northeast of the WSA), and many clay samples from the Moonstone contain clinoptilolite (USDI, GS 1970). In the vicinity of the WSA, the Wagon Bed Formation was apparently well drained during deposition and without saline/alkaline lakes (Boles and Surdam 1979). This would reduce the probability of zeolite mineral deposits in the Wagon Bed Formation in this area. The Moonstone Formation does contain the sediments of saline lakes in the WSA (USDI, GS 1970); their presence increases the possibility of finding significant zeolite minerals in the Moonstone in this area.

The Geologic Survey of Wyoming Map Series MS-14 (1985) shows occurrences of gold, silver, and other minerals in or near Sweetwater Rocks WSAs.

Table 5 lists oil and gas leases in the Lankin Dome WSA. These are post-FLPMA leases which contain the wilderness protection stipulation.

Recreation

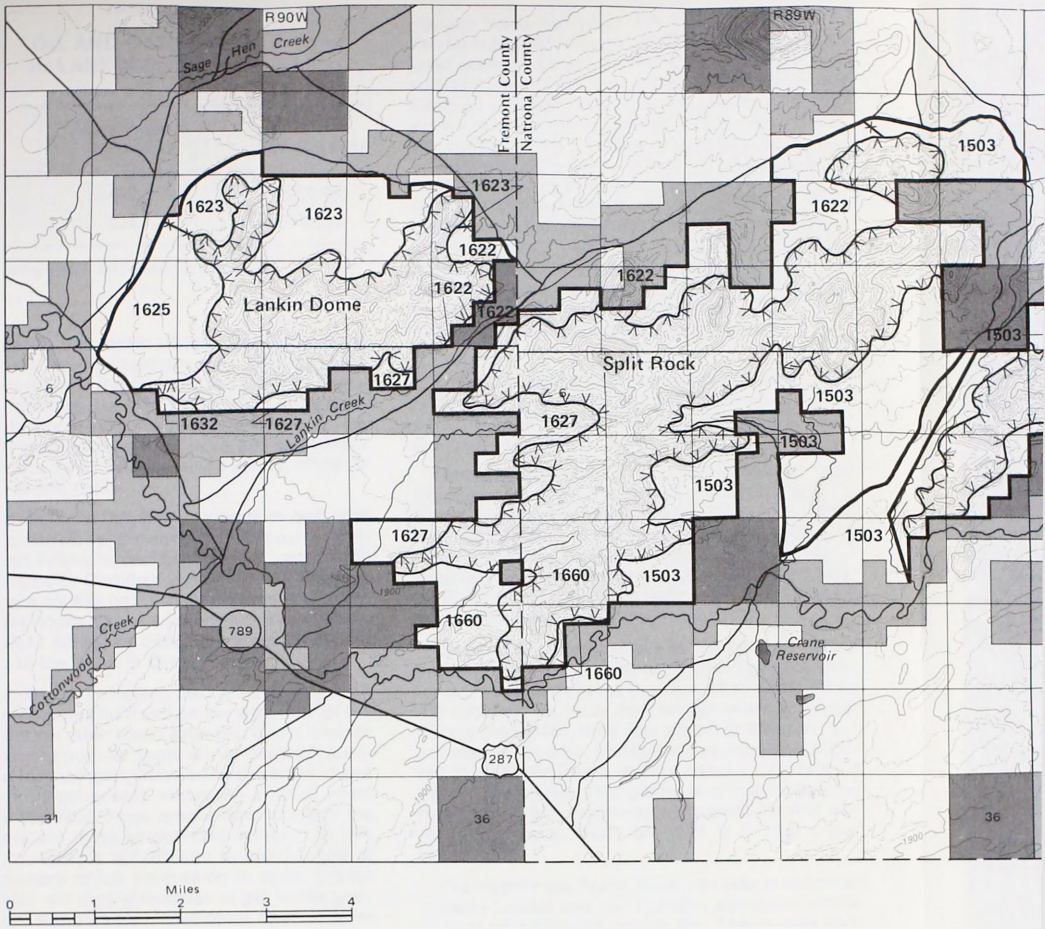
Recreational values in the Lankin Dome WSA are significant. Extremely rough topography and rock outcrops allow for only primitive forms of recreation such as rock climbing, hiking, hunting, sightseeing, camping, and rock collecting. Although use levels are quite low, the WSA attracts users from many parts of the country (an estimated 250 visitor days annually). Recreational ORV use is estimated to be 50 visitor days per year. ORV use depends largely on the population fluctuations of nearby Jeffrey City.

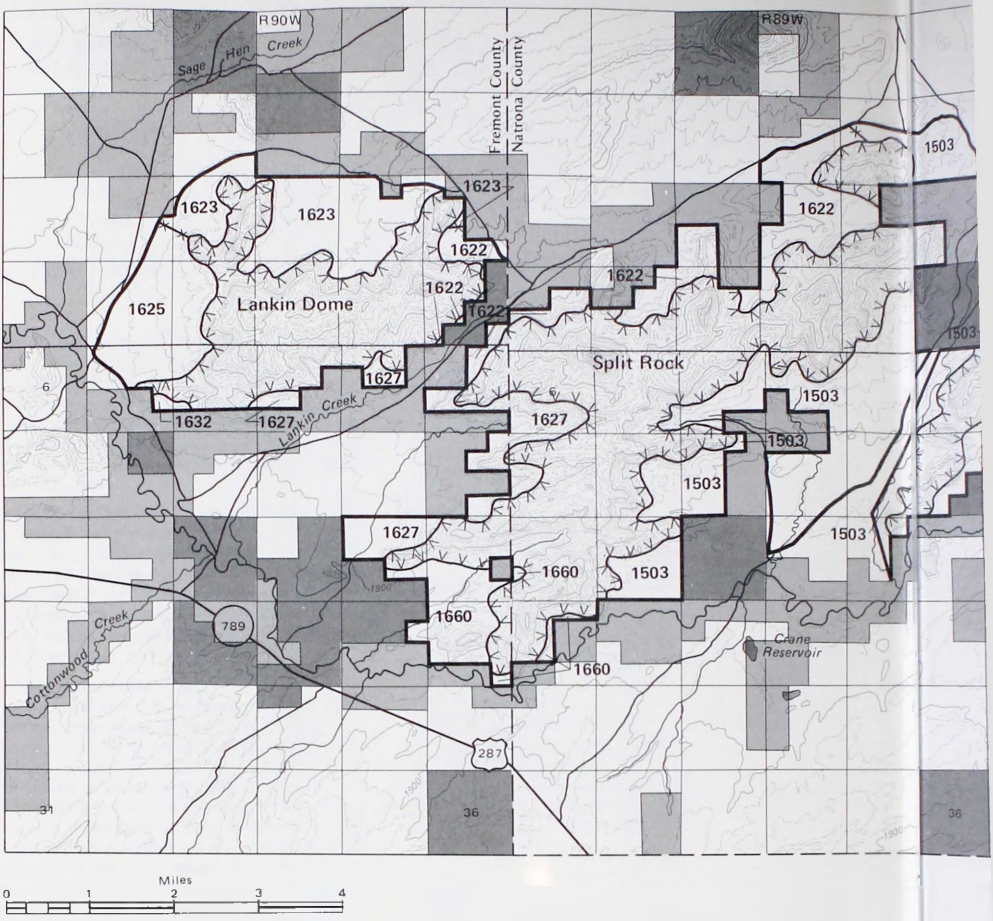
Several special recreation use permits have been issued in the area for outfitter and guide hunting operations. The WSA offers mule deer hunting, and a limited number of antelope licenses are issued each year for a hunt unit encompassing the area. Winter sports such as cross-country skiing and snowmobiling have minimal potential because of poor access and low snowpack, rugged terrain, and strong, nearly continuous winter winds.

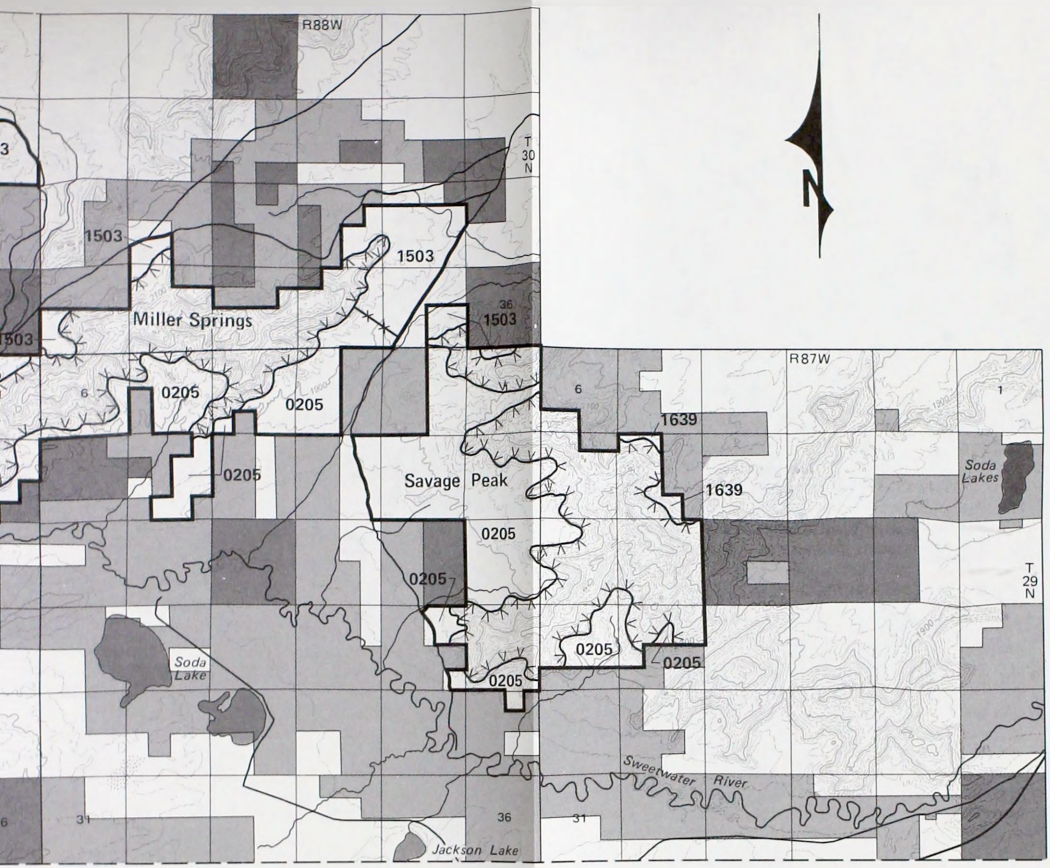
TABLE 4

LIVESTOCK GRAZING ALLOTMENTS IN THE LANKIN DOME WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1622	Lankin Creek	Winter-Spring	Cattle	2,612	213	8	248	20	8
1623	Murphree Pastures	Spring-Summer-Fall	Cattle	9,113	1,836	20	1,061	214	20
1625	Jamerman Pastures	Spring-Summer-Fall-Winter	Cattle	6,790	808	12	478	57	12
1627	Individual	Fall-Winter	Cattle	2,880	526	18	301	55	18
1632	North Hat Pastures	Spring-Summer	Cattle	1,040	155	15	180	27	15


R90W
R89W
Sage Hen Creek
Fremont County
Natrona County
1623
1623
1623
1622
1622
1622
1622
1625
Lankin Dome
1627
1632
1627
Lankin Creek
1627
Split Rock
1503
1503
1503
1503
1503
1503
1627
1660
1660
1660
1503
789
Cottonwood Creek
Crane Reservoir
287
31
36
36
6
6
1900
1900
1900
0
1
2
3
4
Miles


R90W
R89W
Sage Hen Creek
Fremont County
Natrona County
Lankin Dome
Split Rock
Lankin Creek
Cottonwood Creek
Crane Reservoir
1623
1622
1625
1627
1632
1503
1660
789
287
6
31
36
Miles
0
1
2
3
4



WSA Boundary
Federal Land
State Land
Private Land
Rock-Allotment Boundary
Allotment Boundary Fence

1503 Winter Pastures
1622 Lankin Creek
1623 Murphee Pastures
1625 Jamerman Pastures
1627 Individual
1632 North Hat Pasture
1639 Ordway Pocket
1660 Home, North of Highway
0205 Devils Gate

Map 11
Grazing Allotments
Sweetwater Rocks WSAs

TABLE 5

OIL AND GAS LEASES IN LANKIN DOME WSA

Lease Number	Approximate Acreage	Effective Date
W-77823	400	03/01/82*
W-77729	325	02/01/82*

* Lease being held in suspension as of 1/14/87.

The WSA lies adjacent to US Highway 287, a major tourist route to Yellowstone and Grand Teton National Parks from Interstate 80 to the south. Thousands of travelers use US 287 to reach the parks. BLM's Split Rock Interpretive Site (located on US 287 in the vicinity of Lankin Dome and Split Rock WSAs) receives over 30,000 visitors yearly, many on their way to the parks.

The popularity of this highway rests in part with the scenic backdrop provided by the four Sweetwater Rocks WSAs. In tourist materials, local towns and Chambers of Commerce promote US 287 as a scenic route to the national parks and show the Sweetwater Rocks on maps (as one mountain range, not four BLM WSAs) or describe them as a scenic backdrop to the historic Oregon Trail.

Legal access by vehicle to the Lankin Dome WSA is along the Agate Flat Road on the west side of the WSA. Although other roads exist that could provide access to more popular spots within the WSA (Lankin Dome, for example), these cross private land and thus are not legal access routes. As a result, most visitors to the WSA cross private land to reach the area. There are three landowners adjacent to this WSA. Some visitors will attempt to contact one of the landowners to ask permission to cross private land. Others will simply trespass to get to the area. In addition, some visitors leave gates open or drive off existing roads. Most visitation occurs from May through October. About 50 such incidents (visitor contacts, trespass, gates left open, etc.) occur during this period.

Wildlife

The Lankin Dome WSA along with the other three Sweetwater Rocks WSAs, contain a complex intertwining of rock and vegetation. Since many wildlife species appear to use a combination of different sites within these rock lands, the four WSAs in the Sweetwater Rocks have been classified as one standard habitat site, which is described below.

The steep, bare rock slopes, cliffs, and huge boulder fields are laced with cracks and canyons that form distinct and interpersion of many small, disjunct pockets, basins, slopes, benches, and ravines with shallow remnants or accumulations of soil. Virtually all degrees of slope and exposure are represented. The extensive bare rock, along with the varied combinations of slope and exposure, greatly influence the effective moisture on a site-by-site basis. Vegetative cover and compositions respond to variations in these abiotic factors. This results in the overall aspect of fractured bare rocks and boulders interlaced with vegetative communities concentrated in irregular patches and interconnecting stringers. Woodland, shrubland, grassland, and riparian vegetative types are represented on sites varying form a few hundred square feet to 15 or 20 acres in size.

Tree cover varies from scattered limber pines 5 to 50 feet tall, or a few Rocky Mountain or Utah junipers, to small stands that may also contain a few Douglas fir or small aspen clones.

Herbaceous cover varies greatly between sites. Bluebunch wheatgrass, needleand thread, and Sandberg's bluegrass are a few of the principal grass species. Sagebrush, rabbitbrush, rockspirea, wax currant, and Wood's rose comprise the major shrub species. Narrowleaf cottonwood, snowberry, gooseberry, chokecherry, basin wild rye, and Nebraska sedge are common on the mesic sites.

The large boulders and pockets of limber pine and aspen in the units provide cover and foraging areas for mule deer during the summer. Most of the WSAs are classified as mule deer winter-yearlong range. During the winter, mule deer are often found in juniper stands. Shrubs, particularly sagebrush, rabbitbrush, and bitterbrush, are the primary food of mule deer in the winter. Pronghorn antelope inhabit the rocklands in the meadows and grasslands that surround the rocks, much of which is crucial winter range.

The Sweetwater Rocks WSA complex is historical bighorn habitat and still contains adequate habitat to support a bighorn population. The granite rock formations provide escape cover, ant the small pockets of grasses and forbs provide enough forage to support a fairly large bighorn population.

Cottontail rabbits, sage grouse, and mourning doves are plentiful in the WSA. These species use a variety of habitats. Coyotes, bobcats, jackrabbits, and several species of raptors are common throughout the area. The steep cliffs and rock outcrops provide nesting habitat for golden eagles, prairie falcons, and red-tailed hawks, as well as prime hunting habitat for bobcats and coyotes.

Numerous songbirds such as Clark's nutcrackers, violet-green swallows, black-capped and mountain

chickadees, and nuthatches are found in the WSA. Reptiles such as northern sagebrush lizards and prairie rattlesnakes use the area.

The Sweetwater Rocks WSA complex is within the range of bald eagle, peregrine falcon, and black-footed ferret. No bald eagle nests, roosts, or perches are know to exist with the Lankin Dome WSA. Although no peregrine aeries have been found in this WSA, the area has high potential as peregrine habitat. No ferret searches have been conducted in and around the WSA, but prairie dogs, ferrets main prey, are plentiful on the rangelands surrounding the rocks.

Cultural Resources

A search of the cultural resource files for this WSA was conducted. Although there has been little inventory work done in the WSA, some information is available on the types of prehistoric resources present in the general area. Prehistoric hunting camps and habitations are common around the Sweetwater Rocks WSA complex, especially near water sources. Typical site types include surface chipped stone scatter, buried campsites with firepits and stone circle sites. Based on diagnostic artifacts found in and near the Sweetwater Rocks WSA complex, prehistoric Native Americans frequented this region for at least 12,000 years. The prehistoric people who produced those sites were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time at any one location. A particular cultural resource site might represent a one-time use of a location or repeated use for thousands of years.

Because of the proximity of the Sweetwater Rock WSAs to the Sweetwater River, the WSAs were prominent in the early history of this region. The Oregon and Mormon Pioneer Trail ran just south of this WSA. Diary accounts of trail emigrants commonly mention the Sweetwater Rocks. Trapping also occurred periodically in the area along the Sweetwater River and the WSA.

Split Rock

General Characteristics

Virtually all of the topography in the Split Rock WSA is mountainous terrain. These mountains of reddish, decomposing granite are divided by numerous small drainages or pockets. Many of the granite uplifts form gigantic slabs, domes, and/or piles of broken rocks from the exfoliated areas above; the slope exceeds 100% slopes in places. Elevations range from about 6,200 feet in Beaton Pocket to 8,508 feet on McIntosh Peak. Total relief in the unit is about 1,800 feet.

Vegetation is diverse. The rockier, steeper slopes sometimes support little or no vegetation; however, for the most part the mountains support scattered juniper and limber pine, which contrasts scenically with the reddish granite. The most outstanding vegetative character, however, is found in the pockets, where sagebrush and grasses give way to stands of limber pine, juniper, and aspen as one moves up the pocket toward the water source.

Wilderness Values

Size

The WSA has 12,789 acres of contiguous public land with one inholding, a 40-acre parcel of private land, and one 40-acre parcel of split-estate land on which only surface is federally owned. The private parcel was not included in the acreage computation. The unit is bordered on the north by private and federal lands and by a road allowing the only public vehicle access; on the west by private, state, and federal lands; on the south by state and private lands; and on the east by private, state, and federal lands and a road.

Naturalness

For the most part the WSA is in natural condition, free of human works. There are two-track vehicle ways that penetrate the unit in the southeast and west; however, because of vegetative and/or topographic screening and the primitive, unused nature of those ways, they have little or no effect on the naturalness of the unit. An old jade prospect in the southeast is topographically screened from the remaining unit. One dilapidated cabin on public land in Miller Pocket is not visible from more than 100 yards because of the vegetative screening; therefore, it has no effect on the apparent naturalness of the area.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

Within the pockets, mini-forests allow visitors to be free of the influence of others within relatively short distances. The contrast of green trees and the reddish peaks of granite enhances the opportunities for solitude, so that these opportunities are outstanding.

The only areas where solitude is not obtainable are the flats at the mouths of the pockets and the wide alluvial slope of the extreme southeast part of the area. Here, neither vegetation nor topography allows visitors to find secluded spots or to be out of the sights and sounds of others.

The unit provides a variety of opportunities for primitive, unconfined recreation. Water and numerous secluded campsites are available. The size and scenic quality of the WSA provide a desirable setting for backpacking and hiking. Cultural, historical, and wildlife aspects furnish opportunities for nature study, photography, environmental education, and bird watching.

Special Features

The area contains a wide base of supplemental values to draw visitors. The historical aspects of the area include Miller's Cabin (once the home of a trapper), numerous fields of arrowhead and thumbscraper chippings and fragments, and a buffalo jump used by prehistoric people. Split Rock, a historic landmark (shown in photo 4), is in the WSA, as is part of the Oregon Trail corridor on the Sweetwater River, is in the National Register of Historic places.

Livestock Grazing

The WSA currently provides 1,141 AUMs for livestock grazing. The AUMs are spread through portions of four allotments comprising the WSA. All grazing use is by cattle. Table 6 lists details of the four grazing allotments in the Split Rock WSA, and map 10 shows the locations of the allotments. The Green Mountain Rangeland Program Summary (USDI, BLM 1983a) contains a detailed description of livestock grazing management.

Geology and Mineralization

Geology

Like other Sweetwater Rocks WSAs, the Split Rock WSA is within the Granite Mountain Uplift, which is part of a large east-west trending uplift that separates the greater Green River Basin from the Wind River Basin. The Granite Mountains generally have been a structural high since earliest Paleocene time (see appendix D), although the area has undergone repeated structural adjustment since that time. During Miocene and Pliocene times, portions of the area were topographically low and were the sites of deposition.

Photograph 4: Split Rock, a historic landmark for emigrants on the Oregon Trail

TABLE 6

LIVESTOCK GRAZING ALLOTMENTS IN THE SPLIT ROCK WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1503	Winter Pastures	Winter-Spring	Cattle	51,808	5,154	10	8,076	803	10
1622	Lankin Creek	Winter-Spring	Cattle	2,162	1,535	59	248	146	59
1627	Individual	Fall-Winter	Cattle	2,880	853	30	301	89	30
1660	Highway	Winter-Spring	Cattle	1,353	681	50	205	103	50

The predominant bedrock units exposed in the WSA are a medium to coarse grained biotite granite and a granitic gneiss (Tetra Tech 1983). These Precambrian granites and gneisses outcrop in the central parts of the WSA and contain intrusive dikes of basalt and pegmatites.

During Miocene time, the Split Rock Formation was deposited in the topographically low, probably undrained, portions of the Granite Mountains. The Split Rock Formation is generally less than 1,000 feet thick and consists of white to tan, fine to coarse grained sandstones and conglomerates (USDI, GS 1970). During Pliocene time, the Moonstone Formation has deposited in many of the same areas and is now found overlying the Split Rock Formation. The Moonstone reaches a maximum thickness of 1,350 feet and consists of interlayered sandstones, limestones, tuffs, conglomerates, and claystones (USDI, GS 1970). The Split Rock and Moonstone Formations surround the Precambrian core and are exposed in outcrops along the fringes of the WSA.

Mineralization

According to USGS (1983), there is no potential for oil and gas accumulation in this WSA.

The area surrounding the WSA contains occurrences of uranium, thorium, pumicite, sodium carbonate-sulfate, vermiculite, zeolite, and jade.

The uranium and thorium occurrences are associated with pegmatites in the Precambrian rocks and with the Tertiary sedimentary rocks of the Split Rock and Moonstone formations. Occurrences of uranium and thorium in pegmatite dikes are probably very restricted and have low potential for development.

Uranium occurrences in the Split Rock Formation appear small and localized, and little source material (volcanic ash) is present in the formation (USDI, GS 1970). For these reasons, this formation has a low to moderate favorability for the occurrence of uranium. The Moonstone Formation has widespread uraniferous beds and contains more volcanic tuff beds, which could serve as a source of uranium (USDI, GS 1970). For these reasons, the Moonstone Formation has a moderate to high favorability for the occurrence of uranium.

The pumicite occurrences in and near the WSA are small, so they probably have a low potential for development.

Some lakes occupying depressions in the exposed Split Rock Formation contain sodium carbonates and sodium sulfates; however, there are no known soda lakes within the WSA.

The Tertiary Moonstone and Wagon Bed formations contain zeolite minerals in certain locations near the WSA. Phillipsite is found near the top of the type section of the Moonstone Formation in section 17, T. 30 N., R. 89 W., 6th P.M., about 2 miles northeast of the WSA, and many clay samples from the Moonstone contain clinoptilolite (USDI, GS 1970). In the vicinity of the WSA, the Wagon Bed Formation was apparently well drained during deposition and without saline/alkaline lakes (Boles and Surdam 1979). This would reduce the probability of zeolite mineral deposits in the Wagon Bed Formation in this area. The Moonstone Formation does contain the sediments of saline lakes in the WSA (USDI, GS 1970); their presence increases the possibility of finding significant zeolite minerals in the Moonstone in this area.

Economically valuable mineral resources are not known to occur in the Split Rock WSA. The Geologic Survey of Wyoming Map Series MS-14 (1985) shows occurrences of gold, silver, and other minerals in or near the Sweetwater Rocks WSAs.

Table 7 lists oil and gas leases the Split Rock WSA. These are post-FLPMA leases and contain the wilderness protection stipulation.

TABLE 7

OIL AND GAS LEASES IN THE SPLIT ROCK WSA

Lease No.	Approximate Acreage	Effective Date
W-77823	320	03/01/82
W-77729	680	02/01/82

Recreation

Recreational values in the Split Rock WSA are significant. Extremely rough topography and rock outcrops allow for only primitive forms of recreation such as rock climbing, hiking, hunting, sightseeing, camping, and rock collecting. Although use levels are quite low, the Split Rock attracts users from many parts of the country. The annual visitation in this WSA is estimated at 1,750 visitor days per year. Recreational ORV use is estimated to be 250 visitor days per year. ORV use depends largely on the population fluctuations of nearby Jeffrey City.

Several special recreation use permits have been issued in the area for outfitter and guide hunting operations. The WSA offers mule deer hunting, and a limited number of antelope licenses are issued each year for a hunt unit encompassing the area. Winter sports such as cross-country skiing and snowmobiling have minimal potential because of

poor access and low snowpack, rugged terrain, and strong, nearly continuous winter winds.

The National Outdoor Leadership School offers rock climbing instruction and outdoor educational courses in the Split Rock WSA. The school has operated under a BLM special recreation permit since 1972. In 1984, 1,345 user days were reported during spring, summer, and fall courses. Rock climbing opportunities are considered to be excellent.

Like the Lankin Dome WSA, the Split Rock WSA lies adjacent to US 287 and provides part of the scenic backdrop enjoyed by travelers on this highway. Visitors who stop at the Split Rock Interpretive Site are looking directly at the Split Rock WSA. This WSA is the most viewed of the four Sweetwater Rocks WSAs, primarily because of Split Rock itself and its proximity to the interpretive site.

Legal motorized access to the northern-most portion of the Split Rock WSA is possible by crossing contiguous public land on two-track trails. These trails can be accessed from the Dry Creek Road (Natrona County Road No. 321). Alternate trails exist that lead to more popular spots within the WSA (such as Miller Pocket), and others are more direct routes than the trails leading from Dry Creek Road. However, these cross private land and thus are not legal access routes. As a result, most visitors to the WSA cross private land to reach the area. There are six landowners adjacent to this WSA. Some visitors will attempt to contact one of the landowners to ask permission to cross private land. Others will simply trespass to get to the area. In addition, some visitors leave gates open or drive off existing trails. Most visitation occurs during the months of May through October. About 50 such incidents (visitor contacts, trespass, gates left open, etc.) occur during this period.

Wildlife

Wildlife resources for the Split Rock WSA are essentially the same as described for Lankin Dome. Habitat and species composition are similar because the WSAs have similar landforms and vegetation.

Split Rock is also historic bighorn sheep habitat. However, this WSA and Savage Peak WSA contain the forage production, potential escape cover, and potential lambing areas so that they offer the best bighorn sheep habitat of the four Sweetwater Rocks WSAs. These two WSAs provide a good mixture of rugged escape cover and forage.

Cultural Resources

A search of the cultural resource files for this WSA was conducted. Although there has been little inventory work done in the WSA, some information is available on the types of prehistoric resources present in the general area. Prehistoric hunting camps and habitations are common around the Sweetwater Rocks WSA complex, especially near water sources. Typical site types include surface chipped stone scatter, buried campsites with firepits and stone circle sites. A possible drive line and butchering site has been located in this WSA. It consists of stone cairns, stone rings and logs that were apparently used to block escape routes. A large assortment of butchering tools such as choppers and bifaces were also located on the site. One projectile point or knife was found that dates to the Late Archaic Period (1500 B.P. to 3000 B.P.).

Based on diagnostic artifacts found in and near the Sweetwater Rocks WSA complex, prehistoric Native Americans frequented this region for at least 12,000 years. The prehistoric people who produced those sites were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time at any one location. A particular cultural resource site might represent a one-time use of a location or repeated use for thousands of years.

Because of the proximity of the Sweetwater Rock WSAs to the Sweetwater River, the WSAs were prominent in the early history of this region. The Oregon and Mormon Pioneer Trail ran just south of this WSA. Diary accounts of trail emigrants commonly mention the Sweetwater Rocks. Split Rock, located in this WSA, was one of the best known landmarks along the Sweetwater River. This property is listed on the National Register and is withdrawn from all forms of mineral entry and leasing.

Trapping also occurred periodically in the area along the Sweetwater River and the WSA. An old trapper's cabin is located within the WSA in Miller's Pocket.

Savage Peak

General Characteristics

Most of the Savage Peak WSA is rugged and mountainous. Large expanses of bare rock predominate

throughout. Vegetation is generally sparse, but there are some dense stands of Douglas-fir, limber pine, aspen, and cottonwood in drainages. Juniper is scattered throughout the unit. Sagebrush, rabbitbrush, and grasses are found on surrounding plains.

Wilderness Values

Size

The 7,041-acre unit is concentrated in one block in the immediate vicinity of Savage Peak.

Naturalness

The WSA contains a number of intrusions, primarily fences and vehicle ways. Several two-tracked ways penetrate the "pockets" that surround the granitic rocks. Vehicle ways traverse Martin's Cove and the southern part of Savage Pocket, as well as the pockets on the east near the Dumbell Ranch headquarters and on the south near the Sun Ranch at Devils Gate. The central or core area is penetrated by three two-track trails, all faint and generally overgrown with grasses. None detracts from the apparent naturalness of the area.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

The rough, broken topography and the numerous draws and small canyons offer opportunities for solitude. A large pocket on the west provides excellent opportunities for camping below Savage Peak. The pocket is well secluded from the surroundings and contains excellent scenery, which enhances the feeling of solitude. The 7,041-acre size of the area also contributes to the feeling of solitude. Vegetation is dense in places, providing seclusion or screening for visitors.

Savage Peak WSA affords a variety of opportunities for primitive and unconfined types of recreation, including hiking, camping, backpacking, hunting, rock climbing, nature study, and photography.

The Savage Peak WSA contains great vertical relief. Large pockets of open grass and sagebrush on the west are surrounded by steeply rising slopes. On the east, state and private lands cover most of the lower slopes of Savage Peak and the surrounding rocks. Nonetheless, the size of the area and its diverse topography combine to provide some high quality opportunities for primitive recreation.

Special Features

Large expanses of bare granite are not found elsewhere in central Wyoming. In this WSA, they form a natural and highly scenic backdrop for the Sweetwater River Valley, which has a long history related to the exploration and early settlement of the West.

Livestock Grazing

The WSA currently provides 765 AUMs for livestock grazing (cattle) in portions of three allotments that comprise the WSA. Table 8 lists details of the three grazing allotments in the Savage Peak WSA, and map 10 shows the locations of the allotments. The Green Mountain Rangeland Program Summary (USDI, BLM 1983a) contains a detailed description of livestock grazing management.

Geology and Mineralization

Geology

Like the Lankin Dome and Split Rock WSAs, the Savage Peak WSA is within the Granite Mountain Uplift, which is part of a large east-west trending uplift that separates the greater Green River Basin on the south from the Wind River Basin to the north. The Granite Mountains generally have been a structural high since earliest Paleocene time (see Appendix D), although the area has undergone repeated structural adjustment since that time. During Miocene and Pliocene times, portions of the area were topographically low and were the sites of deposition.

The predominant bedrock units exposed in the WSA are a medium to coarse grained biotite granite and a granitic gneiss (Tetra Tech 1983). These Precambrian granites and gneisses outcrop in the central parts of the WSA and contain intrusive dikes of basalt and pegmatites.

During Miocene time, the Split Rock Formation was deposited in the topographically low, probably undrained, portions of the Granite Mountains. The Split Rock Formation is generally less than 1,000 feet thick and consists of white to tan, fine to coarse grained sandstones and conglomerates (USDI, GS 1970). During Pliocene time, the Moonstone Formation was deposited in many of the same areas and is now found overlying the Split Rock Formation. The Moonstone reaches a maximum thickness of 1,350 feet and consists of interlayered sandstones, limestones, tuffs, conglomerates, and claystones (USDI, GS 1970). The Split Rock and Moonstone Formations surround the Precambrian core and are exposed in the outcrops along the fringes of the WSA.

TABLE 8

LIVESTOCK GRAZING ALLOTMENTS IN THE SAVAGE PEAK WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1503	Winter Pastures	Fall-Winter-Spring	Cattle	51,808	25	.05	8,076	4	.05
1639	Ordway Pocket	Spring	Cattle	2,049	89	4	592	26	4
0205	Devil's Gate	Spring-Summer-Fall-Winter	Cattle	83,076	3,281	4	18,617	735	4

Mineralization

According to Spencer and Powers (USDI, GS 1983), there is no potential for oil and gas accumulation in this WSA.

The area surrounding the WSA contains occurrences of uranium, thorium, pumicite, sodium carbonate-sulfate, vermiculite, zeolite, and jade.

The uranium and thorium occurrences are associated with pegmatites in the Precambrian rocks and with the Tertiary sedimentary rocks of the Split Rock and Moonstone formations. Occurrences of uranium and thorium in pegmatite dikes are probably very restricted and have low potential for development.

Uranium occurrences in the Split Rock Formation appear small and localized, and little source material (volcanic ash) is present in the formation (USDI, GS 1970). For these reasons, this formation has a low to moderate potential for the occurrence of uranium. The Moonstone Formation has widespread uraniferous beds and contains more volcanic tuff beds, which could serve as a source of uranium (USDI, GS 1970). For these reasons, the Moonstone Formation has a moderate to high favorability for the occurrence of uranium.

The pumicite occurrences in and near the WSA are small, so they probably have a low potential for development.

Some lakes occupying depressions in the exposed Split Rock Formation contain sodium carbonates and sodium sulfates; however, there are no known soda lakes in the WSA.

Jade occurs in veins or dikes in the Precambrian rock or as placer concentrations in the Tertiary sediments (Tetra Tech 1983). The WSA has a moderate to high potential for the occurrence of jade.

The Tertiary Moonstone and Wagon Bed formations contain zeolite minerals in certain locations. Phillipsite is found near the top of the type section of the Moonstone Formation in section 17, T. 30 N., R. 89 W., 6th P.M., several miles northeast of the WSA, and many clay samples from the Moonstone contain clinoptilolite (USDI, GS 1970). In the vicinity of the WSA, the Wagon Bed Formation was apparently well drained during deposition and without saline/alkaline lakes (Boles and Surdam 1979). This would reduce the probability of zeolite mineral deposits in the Wagon Bed Formation in this area. The Moonstone Formation does contain the sediments of saline lakes in the WSA (USDI, GS 1970); their presence increases the possibility of finding significant zeolite minerals in the Moonstone in this area.

Other economically valuable mineral resources are not known to occur in the Savage Peak WSA. Geologic Survey of Wyoming Map Series MS-14 (1985) shows occurrences of gold, silver, and other minerals in or near the Sweetwater Rocks WSAs.

There are no oil and gas leases or mining claims in the WSA.

Recreation

Recreational values in the Savage Peak WSA are significant. Extremely rough topography and rock outcrops allow for only primitive forms of recreation such as rock climbing, hiking, hunting, sightseeing, camping, and rock collecting. Although use levels are quite low, the WSA attracts users from many parts of the country (the WSA has an estimated total of 1,250 visitor days annually). Recreational ORV use is estimated to be 250 visitor days per year. ORV use depends largely on the population fluctuations of nearby Jeffrey City.

Several special recreation use permits have been issued in the area for outfitter and guide hunting operations. The WSA offers mule deer hunting, and a limited number of antelope licenses are issued each year for a hunt unit encompassing the area. Winter sports such as cross-country skiing and snowmobiling have minimal potential because of poor access and low snowpack, rugged terrain, and strong, nearly continuous winter winds.

The Savage Peak WSA lies adjacent to Wyoming Highway 220, a major tourist route from Casper and Interstate 25 to the east. Travelers use this route to connect with Us 287 to the national parks or use the route to view the historic Oregon Trail. Like Lankin Dome and Split Rock, this WSA provides a highly scenic backdrop to travelers on WYO 220 and is an inherent part of the Sweetwater Rocks described in tourist brochures. BLM's Devils Gate Interpretive Site lies directly adjacent to this WSA. This site receives over 20,000 visitors yearly.

Legal motorized access to the northern part of the Savage Peak WSA is possible by crossing contiguous public land on two-track trails. These trails can be accessed from the Dry Creek Road (Natrona County Road No. 321). Alternate roads exist that lead to more popular spots within the WSA, and others are more direct routes than the trails leading from Dry Creek Road. However, these cross private land and thus are not legal access routes. As a result, most visitors to the WSA cross private land to reach the area. There are three landowners adjacent to this WSA. Some visitors will attempt to contact one of the landowners to ask permission to cross private

land. Others will simply trespass to get to the area. In addition, some visitors leave gates open or drive off existing roads. Most visitation occurs from May to October. About 40 such incidents (visitor contacts, trespass, gates left open, etc.) occur during this period.

Wildlife

Wildlife resources for the Savage Peak WSA are essentially the same as described for the Lankin Dome WSA. Habitat and species composition are similar because the WSAs have similar landforms and vegetation.

Like the other WSAs in the Sweetwater Rocks, Savage Peak is historic bighorn sheep habitat. Two small transplants of bighorns occurred in the Sweetwater Rocks in the 1940's, probably in the Savage Peak WSA. A helicopter survey in 1983 failed to locate any bighorns.

This WSA, along with the Split Rock WSA, offers the best bighorn sheep habitat of the four WSAs in the Sweetwater Rocks. The WSA's forage production, potential escape cover, and potential lambing areas combine to provide quality bighorn sheep habitat.

Cultural Resources

A search of the cultural resource files for this WSA was conducted. Although there has been little inventory work done in the WSA, some information is available on the types of prehistoric resources present in the general area. Prehistoric hunting camps and habitations are common around the Sweetwater Rocks WSA complex, especially near water sources. Typical site types include surface chipped stone scatter, buried campsites with firepits and stone circle sites. Based on diagnostic artifacts found in and near the Sweetwater Rocks WSA complex, prehistoric Native Americans frequented this region for at least 12,000 years. The prehistoric people who produced those sites were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time at any one location. a particular cultural resource site might represent a one-time use of a location or repeated use for thousands of years.

Because of the proximity of the Sweetwater Rock WSAs to the Sweetwater River, the WSAs were prominent in the early history of this region. The Oregon and Mormon Pioneer Trail ran just south of this WSA. Diary accounts of trail emigrants commonly mention the Sweetwater Rocks. Trapping also occurred periodically in the area along the Sweetwater River and the WSA. The foundation of an old trapper's cabin lies in Ordway Pocket on the eastern edge of this WSA.

Miller Springs

General Characteristics

Topography in the Miller Springs WSA is almost entirely rough, broken granite domes and outcrops. Sagebrush flats make up about 10% to 15% of the unit. Parts of the unit resemble a pile of huge monolithic rock masses. Although not unique to Wyoming or the west, the Sweetwater Rocks are unusual, and they provide a scenic backdrop to the historic Sweetwater Valley.

Juniper and scattered limber pine are on the rocky slopes, and aspen along the base of the rocks. Sagebrush and grasses are found on the surrounding plains. Large expanses of barren rock characterize the unit.

Wilderness Values

Size

The Miller Springs WSA is the western portion of the initial inventory area WY-030-123, which contained approximately 19,900 acres. The initial inventory area was split into two units (123a and 123b) by a road that was identified by the public. The road crosses private, state, and BLM-managed land as it traverses the unit in a north-south direction. Other roads and intrusions were identified during the initial inventory. Some narrow fingers of land extending from the unit were dropped. The total acreage dropped because of intrusions and fingers was 885 acres. After these changes, the present size of unit 123b is 6,429 acres.

Naturalness

The Miller Springs WSA is largely free of human imprints. Those that exist are confined to two-track ways and about 3/10 of a mile of fence. The ways are all on the east and northeast ends of the unit. All are in open sagebrush areas.

The trails are quite noticeable while one is traveling on them or adjacent to them. From a distance, they are not particularly noticeable and visual impact is confined to the level, sage-covered areas around the base of the rocks.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

The linear configuration of the WSA limits opportunity for a visitor to find isolation from others in the unit. The degree of solitude available to visitors depends on the number of visitors rather than terrain, vegetation, or size. The opportunity for solitude is limited.

The Miller Spring WSA offers opportunities for primitive recreation such as hiking, camping, rock climbing, hunting, photography, nature study, sightseeing, and bird watching.

Primitive campsites are available in a few places where grassy meadows, shelter, and concealment are available. The lack of well-distributed quality campsites might cause some visitor overlap and confinement of use.

The WSA provides outstanding opportunities for a primitive, unconfined type of recreation. However, the opportunity for solitude is limited.

Special Features

There are opportunities to study geological and scenic attributes in this WSA. It also contains historic and archeological sites.

Livestock Grazing

The WSA currently provides 756 AUMs for livestock grazing, spread between two allotments. Table 9 lists details of the two grazing allotments in the Miller Springs WSA, and Map 10 shows the locations of the allotments. All grazing use is by cattle. The Green Mountain Rangeland Program Summary (USDI, BLM 1983a) contains a detailed description of livestock grazing management.

Geology and Mineralization

Geology

Like the other Sweetwater Rocks WSAs, the Miller Springs WSA is within the Granite Mountain Uplift, which is part of a large east-west trending uplift separating the greater southern Green River Basin from the northern Wind River Basin. The Granite Mountains generally have been a structural high since earliest Paleocene time (see appendix D), although the area has undergone repeated structural adjustment since that time. During Miocene and Pliocene times, portions of the area were topographically low and were the sites of deposition.

The predominant bedrock units exposed in the WSA are a medium to coarse grained biotite granite and a granitic gneiss (Tetra Tech 1983). These Precambrian granites and gneisses outcrop in the central parts of the WSA and contain intrusive dikes of basalt and pegmatites.

During Miocene time, the Split Rock Formation was deposited in the topographically low, probably undrained, portions of the Granite Mountains. The Split Rock Formation is generally less than 1,000 feet thick and consists of white to tan, fine to coarse grained sandstones and conglomerates (USDI, GS 1970). During Pliocene time, the Moonstone Formation was deposited in many of the same areas and is now found overlying the Split Rock Formation. The Moonstone reaches a maximum thickness of 1,350 feet and consists of interlayered sandstones, limestones, tuffs, conglomerates, and claystones (USDI, GS 1970). The Split Rock and Moonstone formation outcrops surround the Precambrian on the fringes of the WSA.

Mineralization

According to USGS (1983), there is no potential for oil and gas accumulation in this WSA.

The area surrounding the WSA contains occurrences of uranium, thorium, pumicite, sodium carbonate-sulfate, vermiculite, zeolite, and jade.

The uranium and thorium occurrences are associated with pegmatites in the Precambrian rocks and with the Tertiary sedimentary rocks of the Split Rock and Moonstone formations. Occurrences of uranium and thorium in pegmatite dikes are probably very restricted and have low potential for development.

Uranium occurrences in the Split Rock Formation appear small and localized, and little source material (volcanic ash) is present in the formation (USDI, GS 1970). For these reasons, this formation has a low to moderate favorability for the occurrence of uranium. The Moonstone Formation has widespread uraniferous beds and contains more volcanic tuff beds, which could serve as a source of uranium (USDI, GS 1970). For these reasons, the Moonstone Formation has a moderate to high favorability for the occurrence of uranium.

The pumicite occurrences in and near the WSA are small, so they probably have a low potential for development.

Some lakes occupying depressions in the exposed Split Rock Formation contain sodium carbonates and sodium sulfates; however, there are no known soda lakes within the WSA.

TABLE 9

LIVESTOCK GRAZING ALLOTMENTS IN THE MILLER SPRINGS WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1503	Winter Pastures	Fall-Winter-Spring	Cattle	51,808	1,611	3	8,076	251	3
0205	Devil's Gate	Spring-Summer-Fall-Winter	Cattle	83,076	2,253	3	18,617	505	3

Jade occurs in veins or dikes in the Precambrian rock or as placer concentrations in the Tertiary sediments (Tetra Tech, 1983). The WSA has a moderate to high favorability for the occurrence of jade.

The Tertiary Moonstone and Wagon Bed formations contain zeolite minerals in certain locations near the WSA. Phillipsite is found near the top of the type section of the Moonstone Formation in section 17, T. 30 N., R. 89 W., 6th P.M., which is about ½ mile north of the WSA. Many clay samples from the Moonstone contain clinoptilolite (USDI, GS 1970). In the vicinity of the WSA, the Wagon Bed Formation was apparently well drained during deposition and without saline/alkaline lakes (Boles and Surdam 1979). This would reduce the probability of zeolite mineral deposits in the Wagon Bed Formation in this area. The Moonstone Formation does contain the sediments of saline lakes in the WSA (USDI, GS 1970); their presence increases the possibility of finding significant zeolite minerals in the Moonstone in this area.

Economically valuable mineral resources are not known to occur in the WSA. Geologic Survey of Wyoming Map Series MS-14 (1985) shows occurrences of gold, silver, and other minerals in or near the Sweetwater Rocks WSAs.

There are no oil and gas leases or mining claims in the Miller Springs WSA.

Recreation

Recreational values in the Miller Springs WSA are significant. Extremely rough topography and rock outcrops allow for only primitive forms of recreation such as rock climbing, hiking, hunting, sightseeing, camping, and rock collecting. Although use levels are quite low, the WSA attracts users from many parts of the country (the WSA has an estimated 500 visitor days annually). Recreational ORV use is estimated to be 250 visitor days per year. ORV use depends largely on the population fluctuations of nearby Jeffrey City.

Several special recreation use permits have been issued in the area for outfitter and guide hunting operations. The WSA offers mule deer hunting, and a limited number of antelope licenses are issued each year for a hunt unit encompassing the area. Winter sports such as cross-country skiing and snowmobiling have minimal potential because of poor access and low snowpack, rugged terrain, and strong, nearly continuous winter winds.

Like the Savage Peak WSA, the Miller Springs WSA lies adjacent to WYO 220, a major tourist route from Casper and Interstate 25 to the east. This WSA is the farthest removed from a highway, but still provides a scenic backdrop to travelers.

Legal motorized access to the eastern-most tip of the Miller Springs WSA is possible by crossing contiguous public land on two-track trails. These trails can be accessed from the Dry Creek Road (Natrona County Road No. 321). Alternate roads exist that lead to more popular spots within the WSA, and others are more direct routes than the trails leading from Dry Creek Road. However, these cross private land and thus are not legal access routes. As a result, most visitors to the WSA cross private land to reach the area. There are three landowners adjacent to this WSA. Some visitors will attempt to contact one of the landowners to ask permission to cross private land. Others will simply trespass to get to the area. In addition, some visitors leave gates open or drive off existing roads. Most visitation occurs from May through October. About 40 such incidents (visitor contacts, trespass, gates left open, etc.) occur during this period.

Wildlife

Wildlife resources for the Miller Springs WSA are essentially the same as described for Lankin Dome. Habitat and species composition are similar because the WSAs have similar landforms and vegetation. The Miller Springs WSA contains no further unique or special wildlife resources other than those already described for Lankin Dome.

Cultural Resources

A search of the cultural resource files for this WSA was conducted. Although there has been little inventory work done in the WSA, some information is available on the types of prehistoric resources present in the general area. Prehistoric hunting camps and habitations are common around the Sweetwater Rocks WSA complex, especially near water sources. Typical site types include surface chipped stone scatter, buried campsites with firepits and stone circle sites. Based on diagnostic artifacts found in and near the Sweetwater Rocks WSA complex, prehistoric Native Americans frequented this region for at least 12,000 years. The prehistoric people who produced those sites were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time at any one location. A particular cultural resource site might represent a one-time use of a location or repeated use for thousands of years.

Because of the proximity of the Sweetwater Rock WSAs to the Sweetwater River, the WSAs were prominent in the early history of this region. The Oregon and Mormon Pioneer Trail ran just south of this

WSA. Diary accounts of trail emigrants commonly mention the Sweetwater Rocks. Trapping also occurred periodically in the area along the Sweetwater River and the WSA.

Copper Mountain

General Characteristics

The Copper Mountain WSA is in Fremont County, about 10 miles north of Shoshoni. It lies east of Boysen Dam, at the upper end of the Wind River Canyon, and is bounded on the west by the Wind River Indian Reservation, on the south and north by private and state lands on Birdseye and Cottonwood Creek, and on the east by the Birdseye Pass County Road and a ranch (see Map 10). U.S. Highway 789 and the Thermopolis to Alcova power line cross the southwest corner of the unit. The Copper Mountain WSA is part of the Copper/Birdseye Pass area of the Copper Mountain Range, also known as the Bridger Mountains.

The topography of the entire WSA is mountainous. Rugged mountains rise from 5,000 feet to 6,400 feet, and steep canyons and rocky slopes dominate the unit. Total relief in the unit is 1,400 feet (see photos 5 and 6).

Wilderness Values

Size

The Copper Mountain WSA contains 6,858 acres —more than 10 square miles—of contiguous public land.

Naturalness

For all practical purposes, the Copper Mountain WSA is natural. A small fenceline and some rundown drift fences are located in two mountain passes, but they blend into the overall view; therefore, these intrusions do not affect the area's naturalness.

Outstanding Opportunities for Solitude and Primitive, Unconfined Recreation

The Copper Mountain WSA offers outstanding opportunities for solitude, but noise emanates from truck traffic on U.S. Highway 20/Wyoming Highway 789. The rough topography, steep drainages, rocky outcrops, and tree cover in some areas screen visitors from one another, making it easy to find seclusion. The potential for recreation is outstanding; it includes hiking, hunting, and sightseeing for geological features. From the tops of the mountain and ridges, Boysen Reservoir is visible.

Photograph 5: Looking east along an outcrop of sedimentary rock in Copper Mountain WSA.

Photograph 6: Juniper-covered slopes in a northward view—Copper Mountain WSA.

The topography offers a challenge and a strenuous walk for day hikers or backpackers as well as for nontechnical rock climbers. Both large and small game species inhabit the area.

Special Features

The Wind River Basin and Boysen Reservoir, which are south and west of the WSA, offer spectacular views. From the mountain peaks one can see a distance of 10 to 50 miles. The view includes the Wind River Mountains and Beaver Rim.

Good opportunities exist for the educational and scientific study of the ecological communities within the area. A variety of geological features can be studied in the WSA.

Livestock Grazing

The Copper Mountain WSA currently provides 635 AUMs for livestock grazing in two allotments. All of the grazing use is by cattle. Table 15 lists details of the two grazing allotments in the Copper Mountain WSA and Map 12 shows the locations of the allotments. The Lander RMP/EIS grazing supplement (USDI, BLM 1985c) contains a detailed description of the proposed livestock grazing management.

Geology and Mineralization

Geology

The Copper Mountain WSA is at the north edge of the Wind River Basin and the southern flank of the Bridger Mountains. The area has been extensively faulted parallel to the Bridger Mountains and is thrust faulted at depth.

Precambrian rocks and Paleozoic sedimentary rocks ranging from Cambrian to Pennsylvanian are exposed in the WSA, as are the Tertiary Wind River Formation and Quaternary alluvium and colluvium.

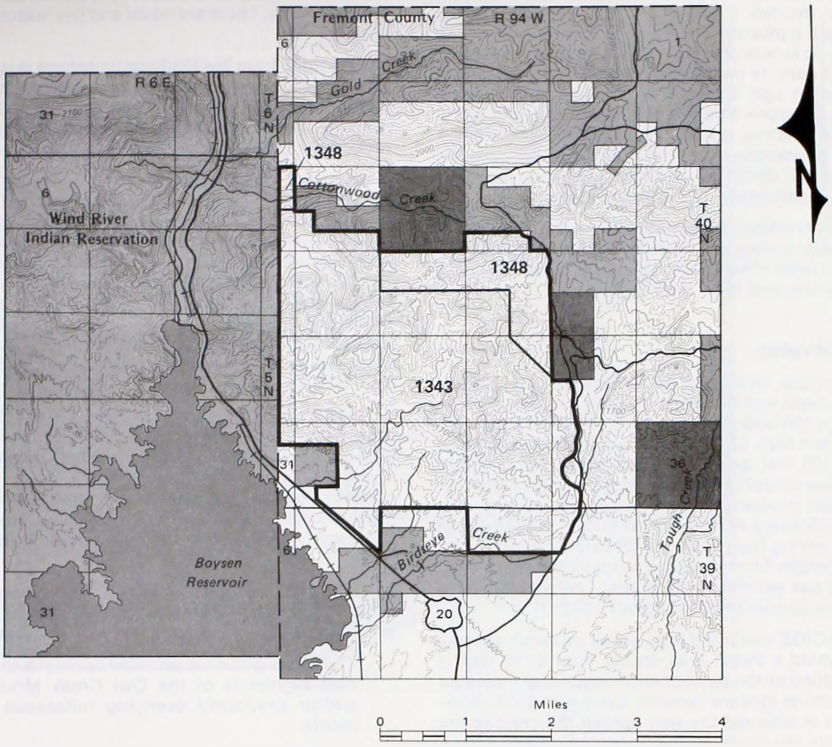
The Flathead sandstone of middle Cambrian age (see appendix D) is the basal sedimentary unit in this area and the oldest unit exposed. The Flathead consists of sandstone with minor siltstone and some conglomerate. The Gros Ventre Formation overlies the Flathead and consists of siltstone, fine-grained sandstone, and some local beds of limestone in the upper part. The Gallatin Limestone of late Cambrian age unconformably overlies the Gros Ventre and consists of thin-bedded silty and sandy limestone, with some limestone pebble conglomerates (Tetra Tech 1983).

The Bighorn Dolomite of late and middle Ordovician consists of fine grained massive dolomite with

TABLE 10

LIVESTOCK GRAZING ALLOTMENTS IN THE COPPER MOUNTAIN WSA

Allotment Number	Allotment Name	Season of Use	Kind of Livestock	Total Federal Acres	Number of Federal Acres in WSA	Percent of Federal Acres in WSA	Total Federal AUMs	Number of Federal AUMs in WSA	Percent of Federal AUMs in WSA
1343	Tuff · ·ek	Winter-Spring Pasture	Cattle	16,690	5,752	34	1,270	437	34
1348	John Herbst	Summer-Fall Summer	Cattle	1,720	1,106	64	308	198	64



WSA Boundary

Federal Land

State Land

Private Land

Allotment Boundary

1343 Tuff Creek Pasture

1348 John Herbst Summer

Map 12
Grazing Allotments
Copper Mountain

lenses of fine grained sandstone near the base. The Madison Limestone of Mississippian age unconformably overlies the Bighorn and consists of fine grained argillaceous limestone and dolomite and sporadic lenses of sandstones. The Amsden Formation of early to middle Pennsylvanian and late Mississippian age consists of a lower, thin-bedded, clayey siltstone; a middle-fine to medium grained friable sandstone; and an upper dolomite. The Tensleep Sandstone of middle Pennsylvanian consists of slightly dolomitic and clayey-fine to medium-grained sandstone (Tetra Tech 1983).

The Wind River Formation of early Eocene unconformably overlies the Paleozoic sediments and consists of beds of sandstone, siltstone, claystone, conglomerate, and local coal beds.

Mineralization

Colorado Interstate Gas Exploration's (CIGE) abandoned well number 1-4-39-94 is adjacent to the WSA in NW¼NE¼, section 4, T. 39 N., R. 94 W., 6th P.M. (see Map 13). This well was drilled to a depth of 17,550 feet, and was completed in April 1980 in the Mesaverde Formation at 12,874 to 13,749 feet for an initial production of 59 mcf of gas per day. The Cody-Niobrara Formations were drill stem tested at rates varying from 1,100 to 1,300 mcf of gas per day. The Frontier Formation was production tested at 200 mcf of gas per day for 17 hours. The well was temporarily abandoned in January 1982.

The CIGE well is the only well in this area that has penetrated a thrust fault deeper than 6,140 feet. It was drilled on the basis of information that indicated a structural closure beneath the thrust fault. However, it is believed the well missed the crest of the geologic structure, so there may be potential for a future gas discovery. Other dry holes have been drilled in the area, but none were drilled deep enough to penetrate the thrust fault.

Two relative rating systems for hydrocarbon potential are described in appendix F. According to Spencer and Powers (USDI, GS 1983), the lands in the Copper Mountain WSA have a low potential for oil and gas. On the basis of experience with the CIGE well no. 1-4-39-94, these lands probably should be rated moderate. Since this well is the only one to have penetrated the thrust fault in this area, subsurface control can be considered sparse. The well tests from the Cody and Mesaverde Formations show that the environment is highly favorable for the occurrence of gas. However the area is not in line with existing production from similar traps and, according to the USGS (1983), the WSA cannot be put into the high-potential category.

The Lander Resource Area RMP/EIS (USDI, BLM 1985b) rates the oil and gas potential for the area as high and moderate on the basis of the presence of formations highly favorable for the accumulation of hydrocarbons. There are no oil and gas leases in the WSA.

Limestone from the Madison limestone is suitable for cement or industrial and agricultural lime, but availability of the limestone elsewhere, distance to potential markets, and inaccessibility in this area make the development potential low.

Inactive uranium prospects and mines are found in both Eocene sediments and Precambrian rocks to the east of the WSA in T. 40 N., R. 92 W., 6th P.M. Uranium in the Teepee Trail Formation is associated with hematitic alteration halos and carbon trash (Yellich, Cramer, and Kendall 1978). Uranium occurrences in the Precambrian rocks are found at geochemical interfaces between descending uranium-carrying oxidized water systems and underlying reducing systems (Yellich, Cramer, and Kendall 1978).

Precambrian rocks are not exposed in the Copper Mountain WSA. However, Precambrian rocks to the east of the WSA contain a broad variety of mineral resources such as iron, copper, gold, silver, tungsten, feldspar, tantalum, beryl, lithium, and rare earth elements. Several mines, some within the past 10 years, have been developed to extract these minerals.

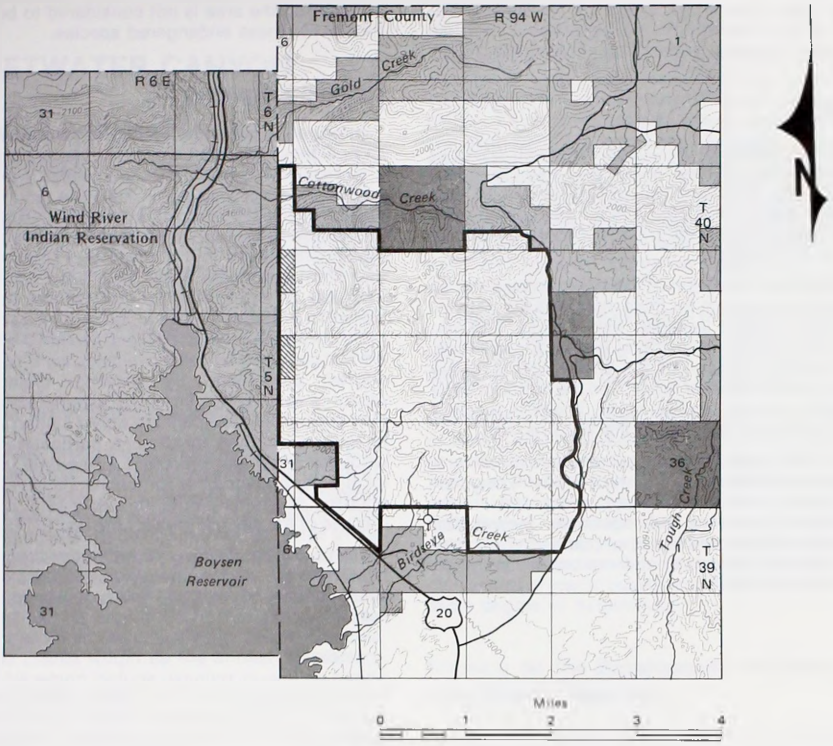
Hesse (1982) considers the Wind River Formation along the north edge of the Wind River Basin as favorable for uranium deposits for the following reasons:

> There is a potential uranium source in the granitic highlands of the Owl Creek Mountains and/or previously overlying tuffaceous sediments.
>
> A host rock of permeable arkosic sandstone is interbedded with siltstone and mudstones.
>
> A reducing agent is available from nearby petroleum fields.
>
> There are traces of pyrite and kaolinization of feldspars in the subsurface. Approximately 1,500 acres are underlain by the Wind River Formation in a band along the southern portion of the WSA, along Birdseye Creek near the eastern border.

Other mineral occurrences are given a low favorability classification in the Copper Mountain WSA.

Recreation

The primary recreational activities in the Copper Mountain WSA are hunting for mule deer, sightseeing, and some rock collecting. The area provides average quality deer hunting for central Wyoming.



WSA Boundary

Federal Land

State Land

Private Land

Lode Claims

Abandoned Oil and Gas Well

Map 13
Mining Claims
Copper Mountain

The lack of water in the area limits the distribution of hunting opportunities. Visitation is estimated to be quite low (100 visitor days annually) because the area is remote and dry. There are no roads in the WSA at the present time. No recreational ORV use is known to occur in the Copper Mountain WSA.

Wildlife

Wildlife habitat on the Copper Mountain WSA can be classified as a Utah Juniper Woodland Standard Habitat Site. Tall, open stands (7-15 feet tall) of Utah juniper usually associated with saltbush, sagebrush, rabbitbrush, and several grass species are characteristic of this habitat.

The northern portion of the WSA is classified as crucial winter range for mule deer, and the remainder of the WSA is yearlong winter range. The majority of the WSA is yearlong habitat for antelope. The southern portion of the WSA along Birdseye Creek is crucial winter range, and the northern edge is spring, summer, and fall range. The WSA receives only occasional elk use during the summer.

The WSA supports cottontail rabbits and chukars. These two species use a variety of habitat types, preferring the rock outcrops and rocky cliffs interspersed with grasses and sagebrush. Jackrabbits, coyotes, bobcats, red foxes, and several other species of small mammals, and raptors are common throughout the WSA.

Although the WSA is within the range of bald eagles, peregrine falcons and black-footed ferrets, no documented sightings of these species have occurred, and the area is not considered to be prime habitat for these endangered species.

Cultural Resources

Information concerning cultural resources in the Copper Mountain WSA has been obtained from a literature review. No cultural resource field inventories have been conducted within this WSA, and no sites are known to be located within the WSA. A few inventories have been conducted near the WSA, and the cultural resources found have been small historic and prehistoric sites. Most have been considered ineligible for nomination to the National Register. Based on the types of sites found, it appears that the prehistoric people who occupied the WSA were hunters and gatherers whose movements were, to a large degree, determined by seasonal changes in resource availability. These people generally traveled in small bands, spending only a limited amount of time in any one location. A particular cultural resource site might represent a one-time use of a location or repeated use for thousands of years. Diagnostic projectile points indicate nearly continuous use of the general area for the last 12,000 years.

The route of the Birdseye Pass Stage Line (in operation from the 1880s to early 1900s) runs along the east boundary of the WSA. This is now an upgraded road.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES

SWEETWATER CANYON

Proposed Action (Partial Wilderness)

Wilderness values on 5,538 acres of the WSA would be protected by legislative mandate, while 3,518 acres would not receive the special legislative protection provided by wilderness designation.

Recommended Portion

Impacts on Wilderness Values

Under the Proposed Action, the 5,538 acres proposed for wilderness would be withdrawn from all forms of mineral entry, subject to valid existing rights at the time of designation. It is assumed that locatable mineral (gold) claims on 720 acres in the portion recommended for wilderness would hold valid discoveries. However, because of the small amount of gold-bearing vein rock in the WSA and the low gold concentration in the gravels of the Sweetwater River, the only activity that is expected on these claims would be the annual assessment work. This would include panning, operating hand-powered sluice boxes, and hand-sampling small amounts of ore. Such activity would result in small spoil piles and excavations (less than a cubic meter each) totaling less than 5 acres over the long term. Although this would adversely affect the wilderness value of naturalness, the impact would be insignificant because the surface disturbance would be spread out over 720 acres in the western part of the WSA and would occur over the course of several years. The disturbance would not be readily visible to the casual observer.

Approximately two miles of two-track vehicle trails would be closed and returned to natural conditions. This would amount to around 150 acres returned to natural conditions. Additionally, the perception of naturalness would be enhanced on 1,000 acres, the estimated areas in which at least a portion of the trails could be seen by the casual visitor. The wilderness value of naturalness would thus be enhanced on 1,000 acres from the vehicle trail closure.

In addition to naturalness, the vehicle closure on 5,538 acres would benefit the wilderness value of outstanding opportunities for solitude and primitive recreation. An estimated 100 visitor days annually of recreational ORV use would be eliminated from the wilderness portion of the WSA. Although encounters between recreational ORV users and other recreationists are infrequent at current levels of use, the elimination of ORV use would benefit the wilderness value of solitude because visitors seeking solitude and primitive recreation experiences would not encounter or hear ORV users in the area.

The WSA's special feature of high scenic value is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic values would be affected to the same degree as naturalness.

Conclusion: Annual assessment work on 720 acres of mining claims would result in less than five acres of surface disturbance over the long term. The impact of this action on the wilderness value of naturalness would be negligible. Wilderness values of naturalness, solitude, and primitive recreation would be enhanced by the elimination of vehicle use in 5,538 acres recommended for wilderness. The special feature of scenic quality would be affected to the same degree as naturalness.

Impacts on the Development of Energy and Mineral Resources

The 5,538 acres recommended for wilderness would be withdrawn from all forms of mineral entry and leasing subject to valid existing rights at the time of designation. There is no potential for oil and gas within the WSA. There are currently 720 acres covered by mining claims within the 5,538 acres proposed for wilderness. It is assumed that the claims would hold valid discoveries. However, because of the small amount of gold bearing vein-rock in the WSA and the gold concentration in the gravels of the Sweetwater River, the only activity expected on these claims would be the annual assessment work. This would consist of panning, hand-operated sluice boxes, and hand-sampling small amounts of ore. Assessment work on valid claims is allowed under BLM's wilderness management policy and consequently would be allowed to continue.

Conclusion: Under the Proposed Action, mining activity would continue at current projected levels. There would be no significant impact on mineral resources.

Impacts on Recreational ORV Use

An estimated 100 visitor days annually of recreational ORV use would be eliminated from two miles of vehicle trails on 5,538 acres proposed for wilderness designation under this alternative. Future opportunities would be forgone because vehicles would no longer be allowed in the area. Vehicular access to the river within the WSA would be eliminated. There are three vehicle trails within the WSA leading to the river which would be closed. Only one actually goes to the river while the other two end at the canyon rim above the river. As a result, fisherman and other recreationists would be required to walk up to 1½ miles to reach the river. This would not be expected to significantly affect visitation in the portion of the WSA recommended for wilderness because most visitors currently walk to the river. Vehicle access to the river would still be available at either end of the WSA.

Conclusion: ORV use of 100 visitor days annually would be eliminated from two miles of vehicle trail on 5,538 acres. This is not regarded as a significant impact because such use would be easily absorbed on adjacent public land.

Nonrecommended Portion

Impacts on Wilderness Values

The 3,518 acres of the WSA recommended for nonwilderness would be open to oil and gas leasing, subject to standard mitigation guidelines. However, there is no potential for oil and gas in this portion of the WSA so no exploration or development would be expected. No large scale development (development on a scale larger than annual assessment work) is expected on the 280 acres of mining claims in this portion of the WSA, because of the small amount of gold-bearing vein rock in the WSA. However, annual assessment work (identical to that described earlier) would result in small excavations and spoil piles less than a cubic meter in size, totalling a maximum of five acres over the long term. The impacts of this action on wilderness values would be negligible because the disturbance would be spread over 280 acres and would occur over the course of several years.

Sights and sounds from recreational ORV use in the nondesignated portion of the WSA would have an adverse impact on solitude and primitive recreation. The impact would be minimal because ORV use is estimated to be only 150 visitor days annually and would remain below 250 days annually as the displaced ORV use is absorbed to areas outside of he designated portion of the WSA. Additionally, most ORV use would occur during the fall months (hunting seasons) when the majority of wilderness-type visitors would be absent.

The WSA's special feature of high scenic value is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic values would be affected to the same degree as naturalness.

Conclusion: Annual assessment work on 280 acres of mining claims would result in less than 5 acres of surface disturbance over the long term. The impact of this action on the wilderness value of naturalness would be negligible. The wilderness values of solitude and primitive recreation would be adversely affected by continued ORV use, but the impact would be minimal because use levels are low and the chances for encounters between ORV users and users seeking primitive recreation experiences would be low. The special feature of scenic quality would be affected to the same degree as naturalness.

Impacts on the Development of Energy and Mineral Resources

The 3,383 acres recommended for nonwilderness would remain open to mineral entry and leasing. There is no potential for oil and gas. Annual assessment work would continue on the 280 acres covered by existing claims within the 3,383 acres of nonwilderness, but no other development is expected because of the small amount of gold-bearing vein rock in the WSA. Mining claims could be located on the 3,383 acres of nonwilderness, but again, the likelihood of development is low for reasons discussed above and due to the lack of potential for other minerals.

Conclusion: Under the Proposed Action, the 3,383 acres of nonwilderness would remain open to mineral entry and leasing; consequently, there would be no impact. However, there is little potential for any exploration or development.

Impacts on Recreational ORV Use

Recreational ORV use on the 3,383 acres proposed for nonwilderness would be limited to approximately two miles of existing trails. Current use is estimated to be 150 visitor days annually and it is

projected that use would remain below 250 visitor days annually for the foreseeable future. Some of the increase in use would be attributable to the displaced ORV use in the designated portion being absorbed in the nondesignated portion.

Conclusion: There would be no significant impacts on ORV use on 3,518 acres.

Adverse Impacts Which Cannot Be Avoided

There are no projected management actions or surface-disturbing activities that will result in any significant unavoidable adverse impacts. The minimal mineral assessment work associated with the mining claims in the WSA will result in only negligible adverse impacts that will be temporary in nature.

Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity

For the portion not designated wilderness, all present, short-term uses would continue. Existing activities would have no effect on long term productivity. Off-road vehicle use, mining, and mineral leasing activities could result in the loss of wilderness values over the long term but are not projected to be of a magnitude that would result in a significant impact.

For the portion designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by an area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to a validity examination.

Irreversible and Irretrievable Commitment of Reosurces

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of a WSA, if not designated wilderness. Wilderness designation would not create an irretrievable commitment of resources within a WSA. Designation would restrict or stop development activities and maintain an area's natural condition. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

No Wilderness Alternative

The entire WSA would be recommended for nonwilderness designation and none of the wilderness values on 9,076 acres would receive the special legislative protection provided by wilderness designation.

Impacts on Wilderness Values

No oil and gas exploration or development is expected. No large-scale development (development on a scale larger than annual assessment work) of locatable minerals is expected because of the small amount of gold-bearing vein rock in the WSA and the low gold concentration in the gravels of the Sweetwater River. However, annual assessment work on about 1,000 acres of existing claims would continue and would disturb an estimated 10 acres over the long term. Such activity, including panning, hand-operated sluice boxes, and hand-sampling of small amounts of ore, would result in small excavations and spoil piles of less than a cubic meter in size. The wilderness value of naturalness would be reduced on less than 1% of the WSA because the surface disturbance would be spread over a large area (1,000 acres) and would occur over the course of several years.

Sights and sounds from recreational ORV use would have an adverse impact on the wilderness values of solitude and primitive recreation. However, ORV users and other users would be separated both spatially and temporally. Most of the ORV use within the WSA occurs either at the Strawberry Creek crossing or remains above the canyon rim. Other recreation activities would be concentrated within the canyon along the Sweetwater River. Additionally, the majority of ORV use is associated with hunting during the fall months when few backpackers and solitude seekers are in the area. As a result, contacts between ORV users and other recreationists would be infrequent and less than 1% of the WSA's wilderness value of solitude and primitive recreation would be affected. Presently, ORV use is estimated to be 250 visitor days annually and is expected to remain below 300 visitor days annually for the foreseeable future.

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would be affected to the same degree and naturalness.

Conclusion: Mining claim assessment work would impact about 10 acres of soil and vegetation, reducing naturalness by less than 1%. Continued ORV use would impact solitude and primitive recreation, again less than 1% of the WSA. The special feature of scenic quality would be affected to the same degree as naturalness. Consequently, wilderness values would not be significantly affected.

Impacts on the Development of Energy and Mineral Resources

Under the No Wilderness Alternative, the entire 9,056 acres of the Sweetwater Canyon WSA would be open to oil and gas leasing. Approximately 5,000 acres (centering around the canyon) would be subject to the No Surface Occupancy Stipulation. Because of the lack of potential for the accumulation of oil and gas resources within the WSA, no exploration or development is anticipated.

Under the No Wilderness Alternative, 5,000 acres of the WSA would be subject to a locatable mineral withdrawal. The withdrawal area roughly corresponds to the partial wilderness boundary. It is assumed that the existing mining claims covering 720 acres would contain valid discoveries of gold, and would thus be available for development. However, the only activity expected on these claims would be the annual assessment work such as described earlier. Other opportunities would be forgone.

The remaining 4,056 acres in the WSA would remain open to locatable mineral entry. There are about 280 acres covered by claims in this portion of the WSA. Because of known resource values in this portion of the WSA, the only activity expected on these claims would be the annual assessment work.

Conclusion: There would be no significant impact on locatable minerals.

Impacts on Recreational ORV Use

Under this alternative, recreational ORV use would be limited to 3½ miles of existing roads and trails over the entire WSA. Because of the area's isolation from major population centers, ORV use in the WSA is expected to remain below 300 visitor days annually in the foreseeable future.

Conclusion: There would be no significant impact on recreational ORV use.

All Wilderness Alternative

Impacts on Wilderness Values

Wilderness values on the entire 9,056-acre Sweetwater Canyon WSA would receive the special legislative protection provided by wilderness designation. The entire WSA would be withdrawn from all forms of mineral entry and leasing, subject to valid existing rights at the time of designation. It is assumed that existing mining claims covering about 1,000 acres within the WSA would represent a valid right, but that activity would be limited to the annual assessment work as earlier described. This would result in 10 acres of surface disturbance over the long term including small excavations and spoil piles (less than one cubic meter each). The impact of this action would be minimal because the disturbance would be spread over a large area (9,056 acres) and over the course of several years. The disturbance would not be readily visible to the casual observer.

About 3½ miles of two-track vehicle trails would be closed and returned to natural conditions. This would amount to about 275 acres returned to natural conditions. Additionally, the perception of naturalness would be enhanced on 1,500 acres, the estimated area in which at least a portion of the trails could be seen by a casual visitor. The wilderness value of naturalness would thus be enhanced on 1,775 acres from the vehicle trail closure.

In addition to naturalness, the vehicle closure on 9,056 acres would benefit the wilderness value of outstanding opportunities for solitude and primitive recreation.

An estimated 250 visitor days annually of recreational ORV use would be eliminated by wilderness designation. Although encounters between ORV users and other recreationists are infrequent at current use levels, the elimination of ORVs would benefit the wilderness values of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area.

The WSA's special feature of high scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic values would be affected to the same degree as naturalness.

Conclusion: Wilderness values of naturalness and solitude would be protected on the entire 9,056-acre Sweetwater Canyon WSA. There would be no negative impact on wilderness values.

Impacts on the Development of Energy and Mineral Resources

The entire WSA would be withdrawn from mineral leasing. No interest has been shown in drilling within the WSA, and it has been identified as having no potential. Future opportunities to explore for oil and gas resources on 9,056 acres would be forgone.

The entire area would be withdrawn from mineral entry. It is assumed that the existing claims within the WSA would represent valid rights. However, because of the small amount of gold-bearing vein rock in the WSA and the low gold concentration in the gravels of the Sweetwater River, the only activity expected on these claims would be the annual assessment work described earlier.

Conclusion: There would be no significant impact on mineral resources or on projected energy resources.

Impacts on Recreational ORV Use

An estimated 250 visitor days annually of recreational ORV use would be eliminated from 3½ miles of vehicle trails on the 9,056 acres proposed for wilderness designation under this alternative. Future opportunities would be forgone. ORV use displaced from the WSA upon designation would be absorbed without consequence on the surrounding public land. Vehicular access to the river within the WSA would be eliminated. There are three access trails leading to the river which would be closed. Only one actually goes to the river while the other two end at the canyon rim above the river. As a result, fishermen and other recreationists would be required to walk up to two miles to reach the river. This would not be expected to affect visitation in the portion of the WSA recommended for wilderness because most visitors currently walk to the river.

Conclusion: Recreational ORV use of 250 visitor days annually would be forgone. There would be no significant impact.

LANKIN DOME

Proposed Action—No Wilderness (No Action)

Impacts on Wilderness Values

Under the Proposed Action, none of the wilderness values on 6,316 acres would be given the special legislative protection afforded to designated wilderness. Sights and sounds from recreational ORV use would have an adverse impact on solitude and primitive recreation but the impact would be minimal with less than 10% of the WSA affected (less than 600 acres). Recreational ORV use levels are low (50 visitor days per year) and contacts between ORV users and other recreationists would be infrequent because the two users are indifferent parts of the WSA.

There is no potential for oil and gas resources in the Lankin Dome WSA, so wilderness values would not be affected by oil and gas exploration or development activities. Given current market conditions, it is unlikely that any exploration or development for uranium, thorium, zeolites, or sulfate minerals would occur in the foreseeable future.

Regarding mineral development, surface disturbance from assessment work (hand-sampling) and extraction of small amounts of ore (up to 100 pounds per year) on the one jade claim located in the southeastern portion of the WSA would be limited to less than 5 acres over the long term. No roads would be needed. The wilderness value of naturalness would be adversely affected on less than 1% of the WSA (less than 60 acres).

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus the WSA's scenic quality would be affected to the same degree as naturalness.

No other management actions are anticipated that would negatively affect the WSA's wilderness values in the foreseeable future.

Conclusion: ORV use would adversely affect the wilderness value of solitude and primitive recreation on less than 10% (less than 600 acres) of the Lankin Dome WSA. Assessment work and extraction of small amounts of jade on one claim would affect the wilderness value of naturalness on less than 1% (less than 60 acres) of the WSA. Neither are considered to be significant impacts on the WSA's wilderness values.

Impacts on the Development of Energy and Mineral Resources

The entire 6,316 acres of the Lankin Dome WSA would be open to oil and gas leasing. However, because there is no potential for oil and gas in the WSA, no exploration or development is anticipated.

The entire WSA would remain open to locatable mineral entry. All potential locatable mineral resources would be available for exploitation. However, the only activity expected is the annual assessment work on the one existing jade claim. No other exploration or development activities would be expected.

Conclusion: The entire 6,316-acre Lankin Dome WSA would remain open to mineral entry and leasing. There would be no significant impact on mineral resources or on projected energy resources.

Impacts on Local Ranching Operations

Under the Proposed Action, recreational ORV use would be limited to the 2½ miles of existing two-track trail. Signs would be placed at strategic locations specifying the restrictions. Overall visitation is expected to remain stable at around 250 visitor days annually for the next ten years of which there is 50 visitor days of recreational ORV use. There would be no displacement of vehicle-dependent recreation onto private land because overall use is not expected to change. Contacts between the three adjacent landowners and recreationists would continue at estimated current level of 50 per year. No change is anticipated from present levels. These contacts would include personal requests for permission to cross or use private property, trespassers, and gates left open. The contacts would continue to be concentrated during the months of May through October.

Conclusion: No increased conflict or impact is expected. Consequently there would be no impact on ranching operations.

Adverse Impacts Which Cannot be Avoided

There are no projected management actions or surface-disturbing activities that will result in any significant unavoidable adverse impacts. The minimal mineral assessment work associated with the one mining claim in the WSA will result in only negligible adverse impacts that will be temporary in nature.

Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity

If this WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, mining, and mineral leasing activities could result in the loss of wilderness values over the long term. However, increases in these activities are not expected.

If the area is designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by the area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to validity examination or future Congressional actions.

Irreversible and Irretrievable Commitment of Reosurces

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of the WSA, if not designated wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within the WSA. Designation would restrict or stop development activities and maintain the area's natural conditions. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

All Wilderness Alternative

Impacts on Wilderness Values

Under the All Wilderness Alternative, wilderness values on the entire 6,316-acre Lankin Dome WSA

would be given the special legislative protection granted to designated wilderness. The area would be withdrawn from all forms of mineral entry and leasing, subject to valid existing rights at the time of designation. It is assumed that the existing jade claim within the WSA would contain a valid discovery, but because of current market conditions and known resource values in the WSA, the only activity expected would be the annual assessment work and extraction of very small amounts of ore. This would result in less than five acres of surface disturbance (small excavations and spoil piles of less than a cubic meter) over the long term. Impacts to the wilderness value of naturalness would be negligible because the disturbance would occur over the course of several years, disturbing less than 1% of the WSA (less than 600 acres).

An estimated 50 visitor days annually of ORV use would be eliminated from the WSA. About 2½ miles of two-track trail would be closed. Encounters between ORV users and other recreationists are infrequent at present levels of use because the ORV use occurs in the flats below the rocks while other recreation uses occur in the rocks themselves. However, the elimination of ORVs would benefit the wilderness values of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area. The estimated 5% increase in nonmotorized forms of recreation would not affect wilderness values because use is presently low and would be fairly evenly distributed throughout the entire 6,316 acres of the WSA.

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would be affected to the same degree as naturalness.

Conclusion: Wilderness values would be protected on the entire 6,316-care Lankin Dome WSA.

Impacts on the Development of Energy and Mineral Resources

Under the All Wilderness Alternative, the entire WSA would be withdrawn from all forms of mineral entry and leasing. It is assumed that the existing jade claim within the WSA would contain a valid discovery. However, because of current market conditions and known resource values in the WSA, the only activity expected would be annual assessment work and extraction of very small amounts of ore (less than 100 pounds per year).

Other opportunities to explore for and develop potential locatable minerals would be forgone. The WSA has no potential for oil and gas resources, so no development of these resources would be forgone.

Conclusion: There would be no significant impact on mineral or energy resources.

Impacts on Local Ranching Operations

An estimated 50 visitor days annually of recreational ORV use would be eliminated from the WSA. Future opportunities for ORV-related recreation would be forgone. Most, if not all, of the vehicle-dependent recreation use would be displaced onto adjacent private land. The private land contains similar ORV opportunities as occurs in the WSA and there is little substitutable public land in the immediate area. In addition, it is estimated that there would be a 5% increase in nonmotorized forms of recreation in the WSA (to 210 visitor days annually) due to wilderness designation and the resultant increase in promotion by tourism groups. The increase in use would not adversely affect the recreation experience in the WSA because the use would be fairly evenly distributed throughout the entire WSA. However, displacement of vehicle-dependent recreation onto adjacent private land and the expected increase in nonmotorized use would result in the adjacent landowners experiencing an increase in the number of public contacts occurring during the summer months.

There are three landowners adjacent to the Lankin Dome WSA. It is estimated that the landowners would receive an additional ten contacts (for a total of 60) with the public during the months of May through October. This would be a 20% increase from the estimated level of 50 per year. Contacts or problems would occur in several forms, including persons making face-to-face or telephone contacts asking permission to cross private land, confrontations with trespassers, and gates left open.

Although the incremental increase in the number of contacts is small, it is significant to the landowners in the following ways. Even a small increase in contacts is seen by the landowners as an intrusion into their ranching operation. Time spent dealing with inquiries, trespassers, open gates, or relocating livestock means time spent away from their ranching operation and additional costs such as repairing gates, and replacing signs. Unpleasant confrontations between landowners and recreationists who are refused access would increase. Landowners would devote additional time and effort in trespass prevention, signing private land, patrols, closing gates, and retrieving livestock.

Cumulatively, a particular landowner would be subject to additional contacts associated with the other three WSAs in the Sweetwater Rocks complex. For example, it is estimated that one landowner would receive an additional 12 contacts on three of the WSAs in the Sweetwater Rocks each year. Given

that the use season for the WSAs is compressed into less than half of the year, this would be a significant intrusion into that landowner's ranching operation.

Conclusion: The 20% increase (from 50 to 60) in contacts between the public and landowners would result in increased disruption of the local landowner's ranching operation.

SPLIT ROCK

Proposed Action—No Wilderness (No Action)

Impacts on Wilderness Values

Under the Proposed Action, none of the wilderness values on 12,789 acres would be given the special legislative protection afforded to designated wilderness. Sights and sounds from recreational ORV use would have an adverse effect on the wilderness value of solitude and primitive recreation but the impact would be minimal because recreational ORV use levels are low (250 visitor days annually) and contacts between ORV users and other recreationists would be infrequent because they use different parts of the WSA. Less than 10% of the WSA (less than 1,200 acres) would be affected. ORV users would be limited to the flats below the rocks while more primitive forms of recreation would occur in the rocks themselves.

There is no potential for oil and gas resources in the Split Rock WSA, so wilderness values would not be affected by oil and gas exploration or development activities. Given current market conditions, it is unlikely that any exploration or development for uranium, thorium, or zeolites would occur in the foreseeable future.

Surface disturbance for assessment work (hand-sampling) and extraction of small amounts of jade (up to 100 pounds per year) on the one claim located in the central portion of the WSA would be limited to less than five acres over the long term. No roads would be needed. The wilderness value of naturalness would be adversely affected on less than 1% (less than 120 acres) of the WSA.

The WSA's special features (scenic quality and historic features) are inherently tied to the wilderness value of naturalness. Thus, the WSA's special features would be affected to the same degree as naturalness.

No other management actions are anticipated that would negatively affect the WSA's wilderness values in the foreseeable future.

Conclusion: ORV use would adversely affect the wilderness value of solitude and primitive recreation on less than 10% (less than 1,200 acres) of the Split Rock WSA. Assessment work and extraction of small amounts of jade on one claim would affect the wilderness value of naturalness on less than 1% (less than 120 acres) of the WSA. Neither are considered to be significant impacts on the WSA's wilderness values.

Impacts on the Development of Energy and Mineral Resources

The entire 12,789 acres of the Split Rock WSA would be open to oil and gas leasing. However, because of no potential for oil and gas in the WSA, no exploration or development is anticipated.

The entire WSA would remain open to locatable mineral entry. All potential locatable mineral resources would be available for exploitation. However, the only activity expected would be annual assessment work and extraction of small amounts of ore on the one existing jade claim over the long term. No other exploration or development activities would be expected.

Conclusion: The entire 12,789-acre Split Rock WSA would be open to mineral entry and leasing. There would be no significant impact on mineral or energy resources.

Impacts on Local Ranching Operations

Under the Proposed Action, recreational ORV use would be limited to the 1½ miles of existing two-track trail. Signs would be placed at strategic locations specifying the restrictions. Overall visitation is expected to remain stable at around 1,750 visitor days annually for the next ten years including 250 visitor days annually of ORV use. There would be no displacement of vehicle-dependent recreation onto private land because overall use is not expected to change. Contacts between the three adjacent landowners and recreationists would continue at the estimated current level of 50 per year. No change is anticipated from present levels. These contacts would include personal requests for permission to cross or use private property, trespassers, gates left open, and so forth. The contacts would continue to be concentrated during the months of May through October.

Conclusion: No increased conflict or impact is expected. Consequently, there would be no impact on ranching operations.

Adverse Impacts Which Cannot Be Avoided

There are no projected management actions or surface-disturbing activities that will result in any significant unavoidable adverse impacts. The minimal mineral assessment work associated with the one mining claim in the WSA will result in only negligible adverse impacts that will be temporary in nature.

Relationship Between Short-term Use of the Environment and the Manitenance and Enhancement of Long-term Productivity

If this WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, mining, and mineral leasing activities could result in the loss of wilderness values over the long term. However, increases in these activities are not expected.

If the area is designated wilderness, it would ensure the long term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by the area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to a validity examination or future Congressional actions.

Irreversibel and Irretrievable Commitment of Reosurces

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of the WSA, if not designated wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within the WSA. Designation would restrict or stop development activities and maintain the area's natural condition. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

All Wilderness Alternative

Impacts on Wilderness Values

Under the All Wilderness Alternative, wilderness values on the entire 12,789 Split Rock WSA would be given the special legislative protection granted to designated wilderness. The area would be withdrawn from all forms of mineral entry and leasing, subject to valid existing rights at the time of designation. It is assumed that the existing jade claim within the WSA would contain a valid discovery, but because of current market conditions and known resource values in the WSA, the only activity expected would be the annual assessment work and extraction of very small amounts of ore. In addition, no new road construction would occur. This would result in less than five acres of surface disturbance (small excavations and spoil piles of less than a cubic meter) over the long term. Impacts to the wilderness value of naturalness would be negligible because the disturbance would occur over the course of several years disturbing less than 1% of the WSA.

An estimated 250 visitor days annually of ORV use would be eliminated from the WSA. About 1½ miles of two-track trail would be closed. Encounters between ORV users and other recreationists are infrequent at present levels of use because the ORV use occurs in the flats below the rocks while other recreation uses occur in the rocks themselves. However, the elimination of ORVs would benefit the wilderness value of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area. The projected 5% increase in nonmotorized forms of recreation would not affect wilderness values because use is presently low and would be fairly evenly distributed throughout the entire 12,789 acres of the WSA.

The WSA's special features of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would be affected to the same degree as naturalness.

Conclusion: Wilderness values would be protected on the entire 12,789-acre Split Rock WSA.

Impacts on the Development of Energy and Mineral Resources

Under the All Wilderness Alternative, the entire WSA would be withdrawn from all forms of mineral entry and leasing. It is assumed that the existing jade

claim within the WSA would contain a valid discovery. Because of current market conditions and known resource values in the WSA, the only activity expected would be annual assessment work and extraction of very small amounts of ore(less than 100 pounds per year). Other opportunities to explore for and develop potential locatable minerals would be forgone. The WSA has no potential for oil and gas resources, so no development of these resources would be forgone.

Conclusion: There would be no significant impact on energy or mineral resources.

Impacts on Local Ranching Operations

An estimated 250 visitor days annually of recreational ORV use would be eliminated from the WSA. Future opportunities for ORV-related recreation would be forgone. Most, if not all, of the vehicle-dependent recreation use would be displaced onto adjacent private land. The private land contains similar ORV opportunities as occurs in the WSA and there is little substitutable public land in the immediate area. In addition, it is estimated that there would be a 5% increase in nonmotorized forms of recreation in the WSA (to 1,575 visitor days annually) due to wilderness designation and the resultant increase in promotion by tourism groups. The increase in use would not adversely affect the recreation experience in the WSA because the use would be fairly evenly distributed throughout the entire WSA. However, displacement of vehicle-dependent recreation onto adjacent private land and the expected increase in nonmotorized use would result in the adjacent landowners experiencing an increase in the number of public contacts occurring during the summer months.

There are three landowners adjacent to the Split Rock WSA. It is estimated that the landowners would receive an additional 15 contacts (for a total of 65) with the public during the months of May through October. This would be a 30% increase from the current level of 50 per year. Contacts or problems would occur in several forms, including persons making face-to-face or telephone contacts asking permission to cross private land, confrontations with trespassers, and gates left open.

Although the incremental increase in the number of contacts is small, it is significant to the landowners in the following ways. Even a small increase in contacts is seen by the landowners as an intrusion into their ranching operation. Time spent dealing with inquiries, trespassers, open gates, or relocating livestock means time spent away from their ranching operation and additional costs such as repairing gates, and replacing signs. Unpleasant confrontations between landowners and recreationists who are refused access would increase. Landowners would devote additional time and effort in trespass prevention, signing private land, patrols, closing gates, and retrieving livestock.

Cumulatively, a particular landowner would be subject to additional contacts associated with the other three WSAs in the Sweetwater Rocks complex. For example, it is estimated that one landowner would receive and additional 12 contacts on three of the WSAs in the Sweetwater Rocks each year. Given that the use season for the WSAs is compressed into less than half of the year, this would be a significant intrusion into that landowner's lifestyle.

Conclusion: The 30% increase (from 50 to 60) in contacts between the public and landowners would result in increased disruption of the local landowner's ranching operation.

SAVAGE PEAK

Proposed Action—No Wilderness (No Action)

Impacts on Wilderness Values

Under the Proposed Action, none of the wilderness values on 7,041 acres would be given the special legislative protection afforded to designated wilderness. Sights and sounds from recreational ORV use would have an adverse effect on solitude and primitive recreation but the impact would be minimal with less than 10% of the WSA affected (less than 700 acres). Recreational ORV use levels are low (250 visitor days per year) and contacts between ORV users and other recreationists would be infrequent because the two uses occur in different part of the WSA.

There is low to no potential for oil and gas resources in the Savage Peak WSA, so wilderness values would not be affected by oil and gas exploration or development activities. There are no mining claims in the Savage Peak WSA. Given current market conditions, it is unlikely that any exploration or development for locatable minerals would occur in the foreseeable future. There would be no impact on the wilderness value of naturalness.

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would not be affected.

No other management actions are anticipated that would negatively affect the WSA's wilderness values in the foreseeable future.

Conclusion: ORV use would adversely affect the wilderness value of solitude and primitive recreation on less than 10% of the Savage Peak WSA (less than 700 acres). This is not considered to be a significant impact. No other management actions are anticipated that would negatively affect the WSA's wilderness values.

Impacts on the Development of Energy and Mineral Resources

The entire 7,041 acres of the Savage Peak WSA would be open to oil and gas leasing. However, because there is no potential for oil and gas in the WSA, no exploration or development is anticipated.

The entire WSA would be open to locatable mineral entry. All potential locatable mineral resources would be available for exploitation. However, there are no mining claims in the WSA and although the potential is there for discoveries of jade, uranium, and thorium, no exploration or development activities would be expected.

Conclusion: The entire 7,041-acre Savage Peak WSA would be open to mineral entry and leasing. There would be no significant impact on mineral resources.

Impacts on Local Ranching Operations

Under the Proposed Action, recreational ORV use would be limited to the one mile of existing two-track road. Signs would be placed at strategic locations specifying the restrictions. Overall visitation is expected to remain stable at around 1,250 visitor days annually for the next ten years. This includes 250 visitor days of ORV use annually. There would be no displacement of vehicle-dependent recreation onto private land because overall use is not expected to change. Contacts between the three adjacent landowners and recreationists would continue at the estimated current level of 50 per year again because no change is anticipated from present levels. These contacts would include personal requests for permission to cross or use private property, trespassers, and gates left open. The contacts would continue to be concentrated during the months of May through October.

Conclusion: No increased conflict or impact is expected. Consequently, there would be no impact on ranching operations.

Adverse Impacts Which Cannot Be Avoided

There are no projected management actions or surface-disturbing activities that will result in any significant unavoidable adverse impacts. The continued low levels of recreational ORV use will only locally result in negligible adverse impacts.

Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity

If this WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, mining, and mineral leasing activities would result in the loss of wilderness values over the long term. However, increases in these activities are not expected.

If the area is designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by the area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to a validity examination or future Congressional actions.

Irreversibel and Irretrievable Commitment of Resources

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of the WSA, if not designated wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within the WSA. Designation would restrict or stop development activities and maintain the area's natural condition. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

All Wilderness Alternative

Impacts on Wilderness Values

Under the All Wilderness Alternative, wilderness values on the entire 7,041-acres Savage Peak WSA would be given the special legislative protection granted to designated wilderness. The area would be withdrawn from all forms of mineral entry and leasing, subject to valid existing rights at the time of designation. No surface disturbance is expected. As a result, the wilderness value of naturalness would be protected over the long term.

An estimated 250 visitor days annually of ORV use would be eliminated from the WSA. About one mile of two-track trail would be closed. Encounters between ORV users and other recreationists are infrequent at present levels of use because ORV use occurs in the flats below the rocks while other recreation uses occur in the rocks themselves. The elimination of ORVs would benefit the wilderness value of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area. The projected 5% increase in nonmotorized forms of recreation would not affect wilderness values because use is low and would be fairly evenly distributed throughout the entire 7,041 acres of the WSA.

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would be affected to the same degree as naturalness.

Conclusion: Wilderness values would be protected on the entire 7,041-acre Savage Peak WSA.

Impacts on the Development of Energy and Mineral Resources

Under the All Wilderness Alternative, the entire WSA would be withdrawn from all forms of mineral entry and leasing. Future opportunities to explore for and develop potential locatable minerals would be forgone. The WSA has no potential for oil and gas resources, so no development of these resources would be forgone.

Conclusion: There would be no significant impact to energy or mineral resources.

Impacts on Local Ranching Operations

An estimated 250 visitor days annually of recreational ORV use would be eliminated from the WSA. Future opportunities for ORV-related recreation would be forgone. Most, if not all, of the vehicle-dependent recreation use would be displaced onto adjacent private land. The private land contains similar ORV opportunities as occurs in the WSA and there is little substitutable public land in the immediate area. In addition, it is estimated that there would be a 5% increase in nonmotorized forms of recreation in the WSA (to 1,050 visitor days annually) due to wilderness designation and the resultant increase in promotion by tourism groups. The increase in use would not adversely affect the recreation experience in the WSA because use would be fairly evenly distributed throughout the entire WSA. However, displacement of vehicle dependent recreation onto adjacent private land and the expected increase in nonmotorized use would result in the adjacent landowners experiencing an increase in the number of public contacts occurring during the summer months.

There are three landowners adjacent to the Savage Peak WSA. It is estimated that the landowners would receive an additional ten contacts (for a total of 50) with the public during the months of May through October. This would be a 25% increase from the current level of 40 per year. Contacts or problems would occur in several forms, including persons making face-to-face or telephone contacts asking permission to cross private land, confrontations with trespassers, and gates left open.

Although the incremental increase in the number of contacts is small, it is significant to the landowners in the following ways. Even a small increase in contacts is seen by the landowners as an intrusion into their ranching operation. Time spent dealing with inquiries, trespassers, open gates, or relocating livestock means time spent away from their ranching operation and additional costs such as repairing gates, and replacing signs. Unpleasant confrontations between landowners and recreationists who are refused access would increase. Landowners would devote additional time and effort in trespass prevention, including signing private land, patrols, closing gates, and retrieving livestock.

Cumulatively, a particular landowner would be subject to additional contacts associated with the other three WSAs in the Sweetwater Rocks complex. For example, it is estimated that one landowner would receive an additional 12 contacts on three of the WSAs in the Sweetwater Rocks each year. Given that the use season for the WSAs is compressed into less than half of the year, this would be a significant intrusion into that landowner's lifestyle.

Conclusion: The 25% increase (from 40 to 50) in contacts between the public and landowners would result in increased disruption of the local landowner's ranching operation.

MILLER SPRINGS

Proposed Action (No Wilderness)

Impacts on Wilderness Values

Under the Proposed Action, none of the wilderness values on 6,429 acres would be given the special legislative protection afforded to designated wilderness. Sights and sounds from recreational ORV use would have an adverse impact on solitude and primitive recreation but the impact would be minimal with less than 10% of the WSA affected (less than 600 acres). Recreational ORV use levels are low (250 visitor days per year) and contacts between ORV users and other recreationists would be infrequent because the uses occur in different parts of the WSA. There is low to no potential for oil and gas resources in the Miller Springs WSA, so wilderness values would not be affected by oil and gas exploration or development activities. Given current market conditions, it is unlikely that any exploration or development for uranium, thorium, or zeolites would occur in the foreseeable future.

Regarding mineral development, surface disturbance from assessment work (hand-sampling) and extraction of small amounts of jade (up to 100 pounds per year) on the one claim located in the southeastern portion of the WSA would be limited to less than five acres over the long term. No roads would be needed. The wilderness value of naturalness would be affected on less than 1% of the WSA (Less than 60 acres).

The WSA's special features (historic features and opportunities for geologic study) are inherently tied to the wilderness value of naturalness. Thus, the WSA's special features would be affected to the same degree as naturalness.

No other management actions are anticipated that would negatively affect the WSA's wilderness values in the foreseeable future.

Conclusion: ORV use would adversely affect the wilderness value of solitude and primitive recreation on less than 10% of the Miller Springs WSA (less than 600 acres). Assessment work and extraction of small amounts of jade from one claim would affect the wilderness value of naturalness on less than 1% of the WSA (less than 60 acres). Neither are considered to be significant impacts on the WSA's wilderness values.

Impacts on the Development of Energy and Mineral Resources

The entire 6,429 acres of the Miller Springs WSA would be open to oil and gas leasing. However, because there is no potential for oil and gas in the WSA is low to nonexistent, no exploration or development is anticipated.

The entire WSA would remain open to locatable mineral entry. All potential locatable mineral resources would be available for exploitation. However, the only activity expected is annual assessment work and extraction of small amounts of jade on the one existing jade claim over the long term. No other exploration or development activities would be expected.

Conclusion: The entire 6,429-acre Miller Springs WSA would be open to mineral entry and leasing. There would be no significant impact on energy or mineral resources.

Impacts on Local Ranching Operations

Under the Proposed Action, recreational ORV use would be limited to the two miles of existing two-track trail. Signs would be placed at strategic locations specifying the restrictions. Overall visitation is expected to remain stable at around 500 visitor days annually for the next ten years. This includes 250 visitor days of ORV use annually. There would be no displacement of vehicle-dependent recreation onto private land because overall use is not expected to change. Contacts between the three adjacent landowners and recreationists would continue at the estimated current level of 40 per year. No change is anticipated from present levels. These contacts would include personal requests for permission to cross or use private property, trespassers, gates left open, and so forth. The contacts would continue to be concentrated during the months of May through October.

Conclusion: No increased conflict or impact is expected. Consequently, there would be no impact on ranching operations.

Adverse Impacts Which Cannot Be Avoided

There are no projected management actions or surface-disturbing activities that will result in any

significant unavoidable adverse impacts. The minimal mineral assessment work associated with the one mining claim in the WSA will result in only negligible adverse impacts that will be temporary in nature.

Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity

If this WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, mining, and mineral leasing activities would result in the loss of wilderness values over the long term. However, increases in these activities are not expected.

If the area is designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by the area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to a validity examination or future Congressional actions.

Irreversible and Irretrievable Commitment of Reosurces

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of the WSA, if not designated wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within the WSA. Designation would restrict or stop development activities and maintain the area's natural condition. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

All Wilderness Alternative

Impacts on Wilderness Values

Under the All Wilderness Alternative, wilderness values on the entire 6,429 Miller Springs WSA would be given the special legislative protection granted to designated wilderness. The area would be withdrawn from all forms of mineral entry and leasing, subject to valid existing rights at the time of designation. It is assumed that the existing jade claim within the WSA would contain a valid discovery, but because of current market conditions and known resource values in the WSA, the only activity expected would be the annual assessment work and extraction of very small amounts of ore. In addition, no new road construction would occur. This would result in less than five acres of surface disturbance (small excavations and spoil piles of less than a cubic meter) over the long term. Impacts to the wilderness value of naturalness would be negligible because the disturbance would occur over the course of several years, disturbing less than 1% of the WSA (less than 60 acres).

An estimated 250 visitor days annually of ORV use would be eliminated from the WSA. About two miles of two-track trails would be closed. Encounters between ORV users and other recreationists are infrequent at present levels of use because ORV use occurs in the flats below the rocks while other recreation uses occur in the rocks themselves. However, the elimination of ORVs would benefit the wilderness value of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area. The projected 5% increase in nonmotorized forms of recreation would not affect wilderness values because use is low and would be fairly evenly distributed throughout the entire 6,429 acres of the WSA.

The WSA's special feature of scenic quality is inherently tied to the wilderness value of naturalness. Thus, the WSA's scenic quality would be affected to the same degree as naturalness.

Conclusion: Wilderness values would be protected on the entire 6,429-care Miller Springs WSA.

Impacts on the Development of Energy and Mineral Resources

Under the All Wilderness Alternative, the entire WSA would be withdrawn from all forms of mineral entry and leasing. It is assumed that the existing jade claim within the WSA would contain a valid discovery. However, because of current market conditions and known resource values in the WSA, the only activity expected would be annual assessment work and extraction of very small amounts of ore (less than 100 pounds per year). Other opportunities to explore for and develop potential locatable minerals would be forgone. The WSA has low to no potential for oil and gas resources, so no development of these resources would be forgone.

Conclusion: There would be no significant impact on energy or mineral resources.

Impacts on Local Ranching Operations

An estimated 250 visitor days annually of recreational ORV use would be eliminated from the WSA. Future opportunities for ORV-related recreation would be forgone. Most, if not all, of the vehicle-dependent recreation use would be displaced onto adjacent private lands. The private land contains similar ORV opportunities as occurs in the WSA and there is little substitutable public land in the immediate area. In addition, it is estimated that there would be a 5% increase in nonmotorized forms of recreation in the WSA (to 265 visitor days annually) due to wilderness designation and the resultant increase in promotion by tourism groups. The increase in use would not adversely affect the recreation experience in the WSA because it would be fairly evenly distributed throughout the entire WSA. However, displacement of vehicle-dependent recreation onto adjacent private lands and the expected increase in nonmotorized use would result in the adjacent landowners experiencing an increase in the number of public contacts occurring during the summer months.

There are three landowners adjacent to the Miller Springs WSA. It is estimated that the landowners would receive an additional five contacts (for a total of 45) with the public during the months of May through October. This would be a 13% increase from the current level of 40 per year. Contacts or problems would occur in several forms, including persons making face-to-face or telephone contacts asking permission to cross private land, confrontations with trespassers, and gates left open.

Although the incremental increase in the number of contacts is small, it is significant to the landowners in the following ways. Even a small increase in contacts is seen by the landowners as an intrusion into their ranching operation. Time spent dealing with inquiries, trespassers, open gates, or relocating livestock means time spent away from their ranching operation and additional costs such as repairing gates, and replacing signs. Unpleasant confrontations between landowners and recreationists who are refused access would increase. Landowners would devote additional time and effort in trespass prevention, including signing private land, patrols, closing gates, and retrieving livestock.

Cumulatively, a particular landowner would be subject to additional contacts associated with the other three WSAs in the Sweetwater Rocks complex. For example, it is estimated that one landowner would receive and additional 12 contacts on three of the WSAs in the Sweetwater Rocks each year. Given that the use season for the WSAs is compressed into less than half of the year, this would be a significant intrusion into that landowner's lifestyle.

Conclusion: The 13% increase (from 40 to 45) in contacts between the public and landowners would result in increased disruption of the local landowner's ranching operation.

COPPER MOUNTAIN

Proposed Action (No Wilderness)

Impacts on Wilderness Values

Under the Proposed Action, none of the wilderness values on the entire 6,858-acre Copper Mountain WSA would be given the special legislative protection afforded to designated wilderness. In the short term, there would be little effect on wilderness values because little development activity is expected, whether or not the area is designated wilderness. In the long term, however, wilderness values would be lost as a result of anticipated oil and gas leasing and exploration in the southern half of the WSA.

Because of the WSA's high potential for hydrocarbon resources, it is estimated that four producing oil and gas wells would be drilled just inside the WSA's southern boundary. Two miles of roads would be constructed within the WSA to access the well locations, and an estimated 40 acres of surface disturbance would result from roads, drill pads, and equipment parking areas at the well sites. The wilderness value of naturalness would be permanently lost on the 40 acres of surface disturbance, and the perception of naturalness would be adversely affected on an additional 800 acres, the estimated area in which at least some portion of the man-made development could be seen by the casual visitor. Impacts to naturalness would be caused by the noise and presence of the machinery; these would be obvious intrusions into an otherwise natural setting.

Opportunities for solitude would also be lost because of the oil and gas activities. Sights and sounds of the machinery, construction of the pads and the wells, and long term maintenance activities would all decrease one's chances of finding solitude to the same degree as naturalness. Thus, outstanding opportunities for solitude would be lost on 840 acres in the southern portion of the WSA because of oil and gas development.

Assessment work on the existing uranium claims would not adversely affect wilderness values. Surface disturbance would be limited to less than 5 acres over the long term.

After the roads are constructed, sights and sounds from recreational ORV use would have an adverse impact on solitude and primitive recreation. However, the impact would be minimal because recreational ORV use levels are not expected to increase beyond 50 visitor days annually for the foreseeable future. Contacts between recreational ORV users and other recreationists would be infrequent.

The WSA's special features (scenic quality and opportunities for ecologic and geologic study) would remain unaffected under the Proposed Action. No other management actions are anticipated that would negatively affect the WSA's wilderness values in the foreseeable future.

Conclusion: The Copper Mountain WSA's wilderness values of naturalness, solitude, and primitive recreation would be lost over the long term on approximately 840 acres, or about 12% of the WSA. Wilderness values on the remaining portion of the WSA would be subject to loss in the long term, but no adverse activities are anticipated in the foreseeable future.

Impacts on the Development of Energy and Mineral Resources

Under the Proposed Action, the entire WSA would be open for mineral entry and leasing. The likelihood for occurrences of oil and gas is moderate to high throughout the WSA.

All of the WSA would be available for oil and gas leasing, exploration, and development, except for areas in excess of 25% slope or within 500 feet of surface water and riparian areas. In addition, surface disturbing activities could not occur during times when wintering wildlife are on their crucial winter ranges. It is anticipated that drilling activities would occur on the southern half of the WSA. It is expected that a field of four producing wells would be developed along the southern portion of the WSA. The surface protection restrictions would not unduly restrain the development of oil and gas resources within the WSA.

All 6,858 acres of the WSA would remain open to locatable mineral entry. The only activity that is expected would be annual assessment work on existing claims on the western boundary of the WSA.

Conclusion: The entire 6,858-acre Copper Mountain WSA would be open to all forms of mineral entry and leasing. There would be no impact to mineral resources under the Proposed Action.

Impacts on Recreational ORV Use

Recreational ORV use would be limited to the two miles of new roads associated with the oil and gas field. This would be a substantial increase in accessibility within the WSA. However, it is anticipated that ORV use would remain low because of a lack of recreation attractions in the WSA, with use not exceeding 50 visitor days annually for the foreseeable future.

Conclusion: Under the Proposed Action, there would be an increase in vehicle accessibility within the Copper Mountain WSA. There would be no significant impact to recreation ORV use.

Adverse Impacts Which Cannot Be Avoided

Adverse impacts which cannot be avoided under the Proposed Action would result from the projected 4-well oil and gas field that is projected to occur in this WSA. Impacts would be the loss of wilderness values as described earlier from the development activities. The expected low level of recreational ORV use will result in only localized negligible adverse impacts.

Relationship Between Short-term Use of the Environment and the Maintenance and Enhancement of Long-term Productivity

If this WSA is not designated wilderness, all present, short-term uses would continue. Off-road vehicle use, mining, and mineral leasing activities would result in the loss of wilderness values over the long term.

If the area is designated wilderness, it would ensure the long-term productivity of ecosystems and would maintain or enhance present wilderness values. Motorized vehicles could no longer be used except where prescribed by the area's wilderness management plan. Mineral resources would not be available for development after the date of designation, subject to a validity examination or future Congressional actions.

Irreversibel and Irretrievable Commitment of Resources

Activities such as mining and mineral leasing could create an irreversible commitment of the wilderness resource in part or all of the WSA, if not designated wilderness. Wilderness designation would not create an irretrievable or irreversible commitment of resources within the WSA. Designation would restrict or stop development activities and maintain the area's natural condition. If, in the future, Congress decided it would be in the national interest to develop certain resources within a wilderness, they can modify the law to allow it.

All Wilderness Alternative

Impacts on Wilderness Values

Under the All Wilderness Alternative, wilderness values on the entire 6,858 acres of the Copper Mountain WSA would receive the special legislative protection provided by wilderness designation. The area would be withdrawn from all forms of mineral entry and leasing. No oil and gas development would occur. It is assumed that the existing claims within the WSA would contain a valid discovery, but the only activity expected would be the annual assessment work, resulting in less than five acres of surface disturbance over the long term. The wilderness value of naturalness would not be affected because the disturbance would occur over the course of several years and would affect less than 1% of the WSA (less than 650 acres).

ORVs would be eliminated from the entire WSA. Although there are currently no roads in the WSA, the All Wilderness Alternative would preclude construction of roads and there would be no increase in vehicle accessibility in the WSA. Thus, the All Wilderness Alternative would benefit the wilderness value of solitude and primitive recreation because visitors would not encounter or hear ORV users in the area. There would be no impact on the WSA's special features under this alternative.

Conclusion: Wilderness values would be protected on the entire 6,858-acre Copper Mountain WSA.

Impacts on the Development of Energy and Mineral Resources

Under the All Wilderness Alternative, the entire WSA would be withdrawn from all forms of mineral entry and leasing. There would be no development of oil and gas resources in the WSA. It is assumed that the existing claims within the WSA would contain valid discoveries. However, because of current market conditions and known resource values, it is expected that the only activity on these claims would be the annual assessment work.

The WSA has moderate to high potential for oil and gas. Future opportunities to explore for and develop these resources would be forgone. The development of an oil and gas field of four wells would be forgone.

Conclusion: The entire WSA would be closed to all forms of mineral entry and leasing. The small oil field development that is projected would not occur. This is considered to be a significant impact on the development of oil and gas.

Impacts on Recreational ORV Use

ORVs would be eliminated from the entire Copper Mountain WSA. The impact would be minimal because there is currently no ORV use in the WSA.

Conclusion: The impact would be minimal because no ORV use is presently occurring in the WSA.

CHAPTER 5

CONSULTATION AND COORDINATION

INTRODUCTION

This document has been prepared by specialists from the BLM's Lander Resource Area office, with assistance from the Rawlins District Office and the Wyoming State Office. Disciplines and skills used to develop this EIS were livestock grazing, soils, recreation, geology, cultural resources, public affairs, wildlife, editing, and word processing. Research began in 1978 with the wilderness review required by FLPMA; the writing of this EIS began in September 1984. The process included inventories of resources, public participation, and coordination with organizations, individuals, and other agencies. Care has been exercised to ensure that the public was consulted and informed throughout the wilderness review process.

An active public involvement process aided in the development of this EIS. Public opinion was elicited through public meetings in Lander and Dubois; mailings to an extensive list of groups and individuals; personal interviews; and a notice in the *Federal Register*.

CONSISTENCY

Coordination with other agencies and consistency with other plans was accomplished through continual communications and cooperative efforts between the BLM and involved federal, state, and local agencies and organizations. The Wyoming Governor's Clearinghouse was supplied with numerous copies of this draft document for review to ensure consistency with the state's ongoing plans. County land use plans have been reviewed by the EIS team to ensure consistency.

The BLM also has coordinated with the Bureau of Indian Affairs from the Wind River Reservation, the Bureau of Reclamation for the adjoining Boysen Reservoir project, and the U.S. Forest Service for the adjoining Shoshone National Forest.

Local groups have been consulted to ensure that all parties are aware of the plans and objectives. A copy of the newsletter was distributed to all persons on the Lander EIS mailing list. This list is available at the Lander Resource Area Office.

Copies of this document are available for review in the BLM offices at Lander, Rawlins, Worland, Casper, and Rock Springs, and in the county libraries in Fremont, Natrona, Sweetwater, and Carbon Counties.

LIST OF PREPARERS

Leadership

Rick Colvin, District Outdoor Recreation Planner

Qualifications: District Outdoor Recreation Planner, Bureau of Land Management, 9 years. M.A., Interdisciplinary Studies, Oregon State University; B.S., Resource Recreation Management, Oregon State University.

Respnsibility: Final EIS Team Leader, overall direction and management on the Final EIS.

Bob Tigner, Regional Planner

Qualifications: Regional Planner, Bureau of Land Management, 5 years; Wildlife Biologist (Research), U.S. Fish and Wildlife Service, 21 years. Ph.D., Biology, University of Colorado; M.S., B.S., Wildlife Management, Colorado State University.

Responsibility: Draft EIS Team Leader, overall direction and management on the Draft EIS.

Interdisciplinary Team

Craig Bromley, Archeologist

Qualifications: Archeologist, Bureau of Land Management, 5 years; Cultural Resource Specialist, National Park Service, ½ year. B.A., Anthropology, University of Nevada, Las Vegas.

Responsibility: Cultural resources.

Missy Cook, Clerk/Typist

Qualifications: Wang Operator, 2 years; Office Clerk, 2 years; A.A.S., Retail Merchandising, Casper College, Casper, Wyoming. Refresher courses in grammar, spelling, and other related secretarial duties.

Responsibility: Word processing.

Tom Crawford, Economist

Qualifications: Economist, Bureau of Land Management, 4 years; Research Specialist, New Mexico State University, 6 months. M.S., B.S., Agricultural Economics, New Mexico State University.

Responsibility: Economics.

Fred Georgeson, Geologist

Qualifications: Geologist, Bureau of Land Management, 11 years. B.S., Geology, University of Wyoming.

Responsibility: Minerals.

Bob Janssen, Geologist

Qualifications: Geologist, Bureau of Land Management, 9 years. M.S., Geology, Colorado State University; B.S., Earth Science/Regional Analysis, University of Wisconsin.

Responsibility: Geology and Minerals.

Beverly Kolkman, Writer-Editor

Qualifications: Writer-Editor and AMtext Operator, Bureau of Land Management, 5 years; Reports Officer and Intelligence Analyst, U.S. Government (Middle East and Washington, D.C.), 7 years. B.A. History and Anthropology, University of Colorado.

Responsibility: Editing of draft.

Lou Layman, Writer-Editor

Qualifications: Editor, Bureau of Land Management; 8 years editing BLM documents, 2 years editing National Park Service documents. B.S., Journalism, University of Colorado.

Responsibility: Editing of preliminary final.

John Likins, Range Conservationist

Qualifications: Range Conservationist, Bureau of Land Management, 7 years. B.S., Forestry and Range Management, Utah State University.

Responsibility: Livestock grazing.

Gary Long, Outdoor Recreation Planner

Qualifications: Outdoor Recreation Planner and Wilderness Coordinator, 5 years, and Land Use Planner (economist), 4 years, Bureau of Land Management; Research Assistant, University of Wyoming, 1 year. B.A., Geography, University of Wyoming.

Responsibility: Recreation, Visual Resources, Wilderness.

Jan Macey, Clerk-Typist

Qualifications: Wang Operator, 2 years; Computer Assistant 2 years, Bureau of Reclamation; Secretary (Steno) 8 years, Bureau of Reclamation.

Responsibility: Word processing.

Debra MacPherson, Lead Clerk

Qualifications: Wang Operator, 6 months; Secretary (Steno) 10 years, legal secretary, 2 years. Refresher course in grammar, spelling, and other related secretarial duties.

Responsibilties: Work processing.

Brad Nelson, Wildlife Biologist

Qualifications: Wildlife Biologist, Bureau of Land Management, 6 years; Raptor Research Specialist, Appalachian Environmental Laboratory, 1 year. M.S., Wildlife Management, Frostburg State College; B.S., Animal Science, University of Maryland.

Responsibility: Wildlife.

Craig Sorenson, Recreation Planner

Qualifications: Outdoor Recreation Planner, Bureau of Land Management, 10 years; Park Ranger, Utah State Parks, 1 year. B.A. Forest Recreation, Utah State University.

Responsibility: Recreation, Visual Resources, Wilderness.

Fred Stabler, Fisheries Biologist

Qualifications: Fisheries Biologist, Bureau of Land Management, 5 years; Fisheries Biologist, U.S. Fish and Wildlife Service, 1 year. M.S., Fishery Resources, University of Idaho; B.S., Wildlife Biology, Washington State University.

Responsibility: Fisheries.

Jack Welch, Wildlife Biologist

Qualifications: Wildlife Biologist, Bureau of Land Management, 18 years. M.S., B.S., Wildlife and Range Ecology, University of Wyoming.

Responsibility: Wildlife.

Technical Review

Jack Kelly, Area Manager, Lander Resource Area

Jerry Valentine, Branch Chief, Lands and Renewable Resources, Lander Resource Area

Technical Review (Continued)

Wayne Erickson, Outdoor Recreation Planner, Wyoming State Office

John Naylor, Chief, Planning and Environmental Coordination, Wyoming State Office

Ed MacTaggart, Environmental Coordinator, Wyoming State Office

Michael Bies, Archeologist, Rawlins District Office

Walter George, Natural Resource Specialist, Divide Resource Area

Don Glenn, Range Conservationist, Rawlins District Office

Mary Hanson, Technical Coordinator, Rawlins District Office

Kraig Howe, Realty Specialist, Rawlins District Office

Gene Kolkman, Assistant District Manager, P&EA Rawlins District Office

Vernon Lovejoy, Outdoor Recreation Planner, Medicine Bow Resource Area

Barbara Pitman, Geologist, Rawlins District Office

Photography

Gary Long, Rawlins District Office

Bob Tigner, Rawlins District Office

Cartography

Terri Mitchell, Cartographic Technician, Wyoming State Office

Carol Ross, Illustrator, Wyoming State Office

Jon Winemiller, Supervisory Engineering Draftsman, Wyoming State Office

Printing

Jerry Carter, Printing Specialist, Wyoming State Office

Sheri Morris, Editorial Assistant, Wyoming State Office

CONSULTATION

Agencies and Organizations Consulted

The planning team consulted with, mailed notices or drafts to, and/or received comments from the agencies and organizations listed below during development of the plan. An asterisk (*) indicates that the agency or organization commented on the draft wilderness EIS. Two asterisks (**) indicate agencies that commented on the draft Lander RMP but had no specific comments regarding the wilderness EIS. These letters are included herein to illustrate that a response was received.

Federal Agencies

U.S. Department of the Interior

- Bureau of Reclamation
- Bureau of Indian Affairs
- Bureau of Land Management (other offices)
- *National Park Service
- Office of Surface Mining
- **Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Bureau of Mines

U.S. Department of Agriculture

- Forest Service
- Soil Conservation Service

**Environmental Protection Agency

Tennessee Valley Authority

U.S. Department of Energy

U.S. Department of Defense

- **Department of the Air Force

U.S. Department of Housing and Urban Development

U.S. Department of Commerce

U.S. Department of Transportation

Congressional Offices

Office of Congressman Cheney
Office of Senator Simpson
Office of Senator Wallop

State Agencies

*Wyoming Office of the Governor

State Planning Coordinator's Office
*Game and Fish Department
Recreation Commission
Highway Department
Public Lands Commission
Public Lands and Farm Loan District
Public Service Commission
University of Wyoming (various departments)
State Historic Preservation Officer
Central Wyoming College
**Archives Museums and Historical Department
Department of Environmental Quality
*Geological Survey
*State Engineer's Office
Oil and Gas Conservation Commission

State Legislators

Senators and Representatives of Fremont, Carbon, Sweetwater, Hot Springs, Sweetwater, Laramie, and Albany Counties

Tribal Business Councils

Arapahoe Business Council
Shoshone Business Council

Local Governments

Board of Fremont County Commissioners
Natrona County Commissioners
Carbon County Commissioners
Sweetwater County Commissioners
Hot Springs County Commissioners
City of Lander
*City of Riverton
*Town of Dubois
Town of Shoshone
Town of Jeffrey City
Town of Atlantic City
Town of South Pass
Fremont County Planning Commission
Natrona County Weed District
Fremont County Weed District
Fremont County Extension Agent
Fremont County Solid Waste Disposal District

Business and Industry

Monsanto Company
Exxon Company, USA
Numex
Colorado Interstate Gas Exploration, Inc.
Hugh Jones Agency
American Nuclear Corp.

Organizations

National Outdoor Leadership School
The Wilderness Society
Continental Divide Trail Society
Sierra Club
Friends of the Earth, Inc.
Wyoming Wilderness Association
Fremont County Audubon Society

PUBLIC COMMENTS AND RESPONSES ON THE DRAFT EIS

Introduction

The issues addressed in this EIS have generated a large number of public comments. There were approximately 600 letters that solely addressed the wilderness recommendations. The writers of most of these letters either were in favor of wilderness for all six WSAs or were opposed to any wilderness designation. The content of these letters is summarized below because there were too many to reproduce in this document.

Comments in favor of wilderness designation generally voiced concern that these valuable lands and resources would not get deserved protection without wilderness designation. They expressed the opinion that there is already too much development in Wyoming, such as a proliferation of roads, cleared forests, scenic degradation through mining and mineral leasing, and loss of wildlife and habitat. These writers said they thought that the Proposed Action for wilderness designation of approximately two-thirds of the Sweetwater Canyon is not sufficient. They included estimates that the total study area acreage makes up less than 1 percent of the land in the resource area.

These writers said all the WSAs are deserving of wilderness status as the last remaining vestiges of the environment that contain special resource values. They also said the values that qualify the areas for wilderness study should be protected from development so that something unique can be preserved for the benefit of this generation as well as future generations.

Most of these letters also expressed support for wilderness designation of the Whiskey Mountain and Dubois Badlands WSAs. Those two areas are not part of this EIS. Study and analysis of those areas, comprising 487 and 4,520 acres, respectively, will be carried out in 1989.

The comments against wilderness designation generally expressed the opinion that Wyoming already has too much wilderness in the national forests and national parks. The commenters said they are concerned that federal lands are being "locked up" and that multiple use will be lost by more wilderness designation. These writers said wilderness is detrimental to the state and local economies because it reduces development in industries such as the timber and mineral-related businesses and adversely affects such "spin-off" values as jobs and tax base. They also expressed the feeling that wilderness is restricted to young and physically fit persons and to those economically able to enjoy the benefit. Some of these correspondents said wilderness should not be set aside for such a small segment of the public. Further concerns were expressed that wilderness would draw more people to a particular area and increase the social problems involved such as trespass on private lands, litter, and vandalism.

A recommendation that an area is nonsuitable for wilderness does not mean the area will be stripped of all protection against surface-disturbing developments. Any study areas released by Congress from the interim management guidelines would be managed under the provisions of the Lander RMP. The study areas lie within the Gas Hills and Beaver Creek resource management units, so they would be managed under the same protective stipulations as prescribed for those two units. Thus, resource values would be protected by such measures as "no surface occupancy" and seasonal restrictions for oil and gas activities where appropriate, withdrawals from locatable mineral activities for some specific areas, mining plan of operation requirements on other specific areas that are open to mining, and avoidance areas for major utility systems.

The public lands around the WSAs are not highly developed. Livestock grazing and wildlife habitat are the primary uses and there is little visual or physical impact involved.

On the other hand, the partial wilderness designation, the Proposed Action for Sweetwater Canyon, does not entail serious tradeoffs between wilderness and nonwilderness uses. For example, there would be minimal impacts on the present access in Sweetwater Canyon, and the economic impacts would be negligible.

FLPMA requires that the Secretary of the Interior complete his review of the public lands for wilderness potential and report his findings to the President within 15 years from the time the act was passed (October 21, 1991). The Secretary's reports will include the BLM's final suitability report, the final EIS (including analysis of public comments), the public hearing records, and the mineral evaluations conducted by the Geological Survey and the Bureau of Mines on any area recommended as suitable for wilderness.

The final step of the reporting process is for the President to make his recommendations to Congress. Only Congress can designate an area as part of the National Wilderness Preservation System.

We appreciate the efforts of so many people in taking time to provide comments. All the letters will be retained on file in the Lander BLM office and will be available for review throughout the remainder of the study process.

Persons Favoring or Opposing Designation

Commenters who wrote to express opposition to or preference for wilderness designation are listed below.

Opposed to Wilderness Designation

Robert G. & Jon D. Hill
Robert R. Dahlstedt
Jim Moore
Ray Shanor
Clyde A. Ray
Elizabeth H. Moore
Dwight Sempert
Mike Ibach
Charles S. Tubman
Dennis Davison
L. R. Esp
Sharon Chumley
Gary Stover
Peggy Bartlett
Lanny Applegate
Kenneth L. Stroh
Mark A. Hickerson
W. A. & Mary Svoboda
David Englert
Lee W. McRae
Mike Yardas
Helen & H. Thomas Weisz
Donald R. Johnston
Nancy Gimple
Sherrie Cox
Joseph W. Scott
Wayne D. Gotfredson
Mark Miller
Raymond P. Virdin
Shane K. Carey
Robin Griffin
Mark McDonald
Helen Dunning
Jerome T. Bergstrom
Frank Gunsaullus
P. Tutton
Ina Baker
Sandy Smail
Norman Leicester
Vickie Garcia
Janice Bergstrom
Daniel C. Wyrick
George L. Patik
William L. Bregar
Wilbert & Nancy Weitzel
Kay Feutz
Robert A. Stanker
Parker Land & Cattle Co.

Opposed to Wilderness Designation (Continued)

Myrtle Shanor
Gary Martin
Rev. Gilbert B. Moore
John Holdaway
Patricia Moore
Mike Black
John & Gladys Weber
Tom G. Massey, Sr.
E. O. Sowerwine
Dallas G. Bissell
Monroe Harvey
Tom Outland
Barbara M. Stroh
Don McOmie
Vannis D. Parkhurst
Rocky Yardas
Sharon & Bob Campbell
Charles Yardas, Jr.
Cal Hancock
Make Krassin
Carol J. Moore
Fred Cox
Paul C. DePriest
Marge Palmer
Mike Nemeth
Bill Hallam
Kenneth J. Carey
Carl Lockard
Daniel M. Logue
Clint Dunning
Don Gunsaullus
Vera Gunsaullus
Scott Smail
John L. Larsen
Dave Smail, Jr.
Gary M. Carrol
Ronald G. Glasscock
Mark Miller
Brian Martinsen
Don Metzger
Duane R. Kaiser
Dan Shatto
Kathy Majdic
Patricia E. Carr
John D. Story
Barbara A. Speyer
Joseph C. Palladino
E. Ralph McCall
Joseph L. Malek
James D. Soumas, Mayor of Riverton
Randy Lehman
Larry Christensen
Dorothy Davison
Trinidad Herrera
Jim Chumley
Diana Currah
Joyce Pickett
Ken Rhoads
Maryann Blackerby
Carrie Hilpp
Max T. Evans
Brian Englert
Shawn D. McRae
Roland Gimple
Curtis Syme
Michael Wright
Tom L. Gotfredson
Andy Palmer
Bill Locke
Michael D. Deep
David Heyborne
DeWayne Appleby
Kent C. Johnson
Wayne Griffin
Michelle Gunsaullus
Kody Hilpp
L. M. Chipley
Robert C. Peterson
Tom Freed
Lander Area Chamber Commerce
Paul Davidson
Alan L. McOmie
Tom Heil
Christine Rushing
Gerald Applehans
Norman L. Tutton
Robert Cecrie
Cindy Hale
Terry K. Thompson
Frank Madewell
Charlotte Wentworth
G. Mike McDonald
Jack Weger
Dave Tafoya
Earl W. Smith
Kathy Lacy
Jack Armstrong
Moine C. Kisor
Maryann Rathbone
Frank S. Reed
Jim Sable
Elaine Hudspeth
Tracy Davison
Mrs. George Hornecker
Janet Picherd
Robert Milburn
Clydene R. Allen
Steve Brown
Nancy Corbett
Bud Carpenter
Tammi Tutton
Gladys Felix
Darin Raymond
Terri Edwards
Keith Bieber
Bill & Cyd Freese
Elton D. Martin
Colleen A. Martin
Lewis B. Diehl
James Siwik
Donald C. Clausen
Tom Lucas
Mike McRann
Jeannie Larsen
Karla J. Cooper
Bille Dutcher
Hugh McRae
Mervin Thompson
Leslie Wilson
Dale Jacob
Aaron Shatto
Nancy Van Fleet
Lee Parrill
John E. Murphy
Deborah L. Derbish
Gerald Moats
Fred Steward
Carol L. Boyd
Mr. & Mrs. Mark Keiser
Leon Atwood
Don Jacobs
Larry Sutt
Melba R. Gibson
Vicki Metzger
Chad Sable
Lyn Sinclair
Cortni Sable
Duane Clubb
Rudy Herbst
Henry J. Hudspeth
Donald Davison
George Hornecker
Mary F. Alexander
Eileen Milburn
Ruby C. Herman
Martha McRae
Angela V. Davey
Alfred & Virgina Lindell
Jim Waters
Norman Cronk
Don Metzger
Shannon Dickinson
Donna Applegate
Bill Hirasawa
Laurel Christensen
Ken Jones
Wendell V. Shields
Sandy Siwik
W. L. Taylor
Mike Larsen
Richard Cooper
Karley Watt
Darel L. Wentworth
Jeff Palmeno
Lynn McRann
Ron Given
Dorthy Hill
Thomas R. Jeffres
Becky Downs
James L. Hubble
Donald E. Reed
Mavis Hubble
Marjorie Graham
Charlene Seely
Joan Saltz
Millie Rhoads
Don Kramer
Ethel Tutton
Jarold W. LaDoucer
Judy K. Sutt
James W. Gibson
Diane Atwood
Betty Sable
Bud Sinclair
Priscilla Herbst
Mark Newton
Ken Rathbone
Jerry Alexander
Alice O. Freese
Wendy Minemyer
Sidney Freese
Tahna Balzly
Shawn McRae
Glen E. Herman
Cyd Freese
Michael S. Tutton
Betty Weger
Debby Metzger
Wilson J. Felix
Bill Heninger
Denise R. Nelson
Chris Peterson
Don Calhoun
Molly Browall
Viola Wickstrom
C. Jack Minter
Richard Davey
Thomas J. Cooper

Opposed to Wilderness Designation (Continued)

George Lucas
Pat Cooper
Linda Van Fleet
Irene Bernier
E. G. Macfarlane
Mary Herbst
Don Hundley, Jr.
Brigida Guymon
Lowell A. Morfeld
Roy Trimmer
Robert Van Fleet
Jack Corbett
Florence Faulkner
James W. Heath
Lee W. McRae
Harry C. Norris
Charlie McIntosh
Jack Willert
Tom Sun
Mike Mariner
Larry L. Morrison
Mr. & Mrs. Richard Burke
Dennis H. Sun
Fay Gilmore
Collins Jamerman
Walter Cassell
J. H. Main
Doug Thompson
Bruce Graham
Rita McLaughlin
Mary R. Oliver
E. F. Thompson
Damon Wilson
Chad G. Morrison
Leo Larson
Delores C. Fessler
Valera Guinard
Roy Darnell
Lorie Darnell
Fred E. Ereckson
Sheralyn Hollingsworth
Charlie Bobbitt
Bernard Sun
Kenny Jamerman
Jim & Shirley Baker
Joe E. & Jennifer McIntosh
William M. McIntosh
Mrs. Robert Wiley
James M. & Nadine A. Graham
Ron Wilmes
Thomas E. & D'Arlyn Murphree
Albert Myers
Don O. Fox
Don Steward
Denise Thompson
Lynn M. Heath
Larry L. Morrison
Michael W. Allington
Jeannete Morrison
Arnold West
Judy Graham
William I. Coats
Leonard Graham
David Ward
Mrs. Wyoma Burris
William Hollingsworth
John E. Mikkelson
Audrey Willert
Noeline Sun
Romona Shull
Alice B. Morrison
Laurie Redland
Jerriet McIntosh
John Gilmore
Tom & Marjorie Graham
Damon Wilson
Tom Redland
Justin Jamerman
Wayne Fox
Billy McLaughlin
Chuck Mott
Betty Lou Gustin
Scott Ward
Evelyn C. Newell
Elizabeth A. Metcalf
Martin Mazurie
William A. Coats
Mark L. Morris
Donna Wintermote
William C. Burris

In Favor of Wilderness Designation

Mary A. Gravitt
Gerald R. Brookman
Larry Murante
Pat Boomer
M. J. Anderson
Jeffrey Schneiber
David R. Wallace
Mari Tustin
George A. Bridges
Nancy L. Russell
Dr.& Mrs. Larry Allen
T. Russell Mager
Anne Model
John M. Kuzmiak
Priscilla Kezar
James B. Breese
Norman Johnson
Gary C. Wong
Gregory Pais
Lydia Edison
Drummond Mansfield
George Lagomarsino
Mrs. E. Harold Coburn
William T. Rose
William MacAulay
Elliott Bernshaw
Mrs. Andrew Wills
Erwin A. Bauer
David S. Gussman
Tom Sewell
Abraham Wilensky
Robert & Lynn Seisehnop
R. Saigh
Martin H. Gerber
Rhea Moss
Reed Secord
Joe & Adia Cabell
Beverly Fogleman
M. Boysen
Alison Hutchings
Kathryn Hiestand
Thomas Young
Jeffrey R. Foster (Sierra Club-Wyoming Chapter)
R. W. Van Alstyne
Marcus Jernigan
Mary Finlayson
Jerry T. Drake
Thomas H. Slone
Sue Lowry
Lois Wilson
Milda Hester
Anona M. Heimbigner
Daphne O'Regan
Jeff Thieret
Hortense McIver
Ron Guenther (Sierra Club Redwood Chapter)
Grace B. & Daniel L. Morris
Jeanette Alosi
Rex & Betty Mason
Joesphine Briggs
Cathering Kuhnle
William & Genevieve Sattler
Ron P. Good
Robert T. Johnson
John F. Wurzel
Sheri Behrens
Gerald L. Boomer
Dara Newman-Samuels
Edgar E. Hancock
Scott Schulke
Edith Olson
Kenneth S. Warren
Bruce Edwards
Linda & Bill Alexander
B. Newell
John Canfield, M.D.
S. Henry Hall
David H. Hepler
Ralph Delfino
Dean Diers
Helen Scull
Maria A. Telesca
George Catalano
Sidney M. Hirsh
Charles H. Ellis, III
William J. Sander, D.C.
Celia Lindlom
William J. Laden
Philip M. Harmon
Ned W. Stone
Frank Norris
Jane Denton
Neltje
Gene Anne Parker
Kenneth J. Macklin
Elizabeth Howell
Jeff Vaughan
Alex Bennett
Randy & Dierdre Rand
Carl D. Mitchell
Steven W. Patwell, M.D.
Marian Gruenfelder
Ken Bunch
Alex L. Pugh
Gertrude Platt
Mrs. Thomas N. Bowdle
Ola Harrison
Neil McMillan
Thomas J. Kluk
Laurie A. Whitlock
Mary B. Donchez
Carl Rouch
Harold A. Keelen, Jr.
Joaquim Panozzo
Jennifer Lawson
Joan J. McCrory
Allen L. Hammer
Richard G. Cook
James and Sheri Beck
R. Craig Stotts
Sterling Vinson

In Favor of Wilderness Designation (Continued)

John F. Pamperin
Robert Zalkin, Cantor
Dr. Laura Pare
Elizabeth Heestaeed
Kennile B. Prosser
Neal Miller
Dennis R. Nelson
Thomas Ribe
Anna M. Koval
Joel Goldstein
Stephen W. Keith
Thomas J. Messenger
Jack & Joshua Groff
Ann Fisk
Joseph Lee Boyle
Thomas Grisham, M.D.
Jack Hinrichs
Kirk W. Genger
Kathryn A. Holden
Gerald Ottone
Ernest W. Mueller
Nancy L. Nesewich
Thomas A. Bliss
Nancy Gingrich
Randy E. Holder
Richard H. Hiers
John B. Lund
Rebekah Johnson
Mark Gooding
Andrew Graham
Lois O. Ormand
Mrs. Fannie Lee Ford
Fred K. Gray
Hollis Marriott
Marian Fox
Trudy Smiley
Rima Freid, Ph.D.
Mr. & Mrs. R. L. Olsen
Dan Chatfield
Robert Markeloff
Orley Pitt
Stephen Becker
Jim McCann
Sherry & Weldon Shelley
Richard E. Cooper
John M. Walkenhorst
Robert W. Graves
J. L. Wyatt
Barbara K. Girdler
Ronald P. Lewis
Barbara H. Trought
Mrs. Catherine Giggs
Brenda K. Harms, OTR
Ray Vaughan
Gerald Haslam
Tim DiChiara
Leslie A. Rogers
R. A. Rosenberg
Matt McWenie
Robert F. Mueller
Stephen B. Johnson
David Barron
Richard C. Wilson
Leonard J. Choate
Ken Berian
Donald J. Walsh
Robert Mosman
Steve Warble
Joseph R. Hunkins
Ruth M. Loeffelbein
Charles E. Axthelm
Dr. Mike & Rae Newman
Eleanor P. & Dennis J. Fleming
Sherill Lori
Bob Hoffman
Walter & Dorothy Pelech
Angus Brown
Timothy W. Pemberton
Jim Allard
Thomas G. Eick
Betty Follis
Joseph D. O'Neill
Gregory J. Hickey
Donald Purinton
Betty L. Starratt
Kevin Fernlund
Celia Scott-Von der Muhll
Paul J. Conn
Hazel Koehler
Caren Zimmern
Joan Tockstein
Gerda Mansell
Dennis Hining
Allan Sweger
Mark Derichsweiler
Tom & Virginia Angenent
Robert O. & Ruth W. Zeller
Rudolph Sucharda
R. E. Peterson, II
James V. Lewis
Eric A. Greschner
Neil O. & Jennifer S. Miller
Christopher S. Cockey
Mary Kleinert
Thomas Gregory
Katherine A. Gagne
Paul C. & Pamela R. Bosch
Alison Gieschner
Alan Carlton
Caroline Yorke
Brian Suderman
Timothy Rockhold
Kurt O. Otley
Leonard Burkhardt
Dorene D. Johnston
Tina Gregory
Helen A. Newhouse
John M. Chaplick
Thomas W. Giblin, Jr.
Jim Wilson
Mark S. Gailey
Erika Schnurmann
Olga M. Rosche
Max Zischkale, Jr.
Gwendoly Boudreaux
Tony Chambers
Virginia Bucknam
Rosemary Michalec
Lawrence A. Papp
Barbara R. Hume
John E. Earl
David Clarendon
Iola Jokoboski
Ted Rosa
Sara Traum
Joyce Holmes
Ken Driese
Steve Kuchera
Dorothy J. Boulton
D. Mark Parr
Robert H. Kravich
Connie Clauson-Pearce
Janet Carruthers Lashly
Connie Wilbert
Ernest Wilson
Maureen Lindh Carter

In Favor of Wilderness Designation (Continued)

Elisabett J. Lamback
Ken Berg
Norman F. Richardson
Rosa McCann
John Sargent
Frank Traficante
Michael & Constance Schmotzer
Steve Champoux
Susan C. MacGillis
Pete Weiba
Jean M. B. & James E. Genasci
Dan Ritter
M. Skov
Holly Jensen
Brad Young

Comments and Responses

Letters in the following section are arranged in the order received, first from agencies and organizations followed by individuals. The BLM's response immediately follows each letter. Comments within each letter are numbered, and the responses are numbered correspondingly. Some of these comments were used in making changes from the draft EIS when this preliminary final EIS was prepared.

All comments are printed verbatim. Handwritten comments have been typed verbatim for better readability and have been noted as such.

In addition to letters received from agencies and organizations, letters from the following 21 individuals were received.

Robert F. Bucknam
Alice L. Gustin
Mary Scharda
Sharon E. Dooley
Norman & Gaynell Park
Joe Brandl
Bruce Hamilton
Dexter Perkins
Melvin E. Gustin
Bruce J. Noble, Jr.
Rob Kindle
Meredith Taylor
Gary Keimig
George D. Langstaff
W.H.B. Graves
Martie Crone
Donald A. Smith
Jim Minick
Mark Hughes
Tory Taylor
Lynn Kinter

1

DEPARTMENT OF THE AIR FORCE
AIR FORCE REGIONAL CIVIL ENGINEER CENTRAL REGION
1114 COMMERCE STREET
DALLAS, TEXAS 75242

18 NOV 1985

Mr. Hillary A. Oden, State Director
Wyoming State Office, BLM
P.O. Box 1828
Cheyenne, Wyoming 82003

Dear Mr. Oden

Thank you for allowing us the opportunity to review the Draft Environmental Impact Statement, Resource Management Plan, Grazing Supplement and Wilderness Supplement for the Lander Resource Area, Wyoming.

We continue to express our support of the BLM in developing functional management plans for lands under its control. The Air Force concern for these management issues contains the need to retain use of existing and the establishment of future military flight training areas and routes which may traverse these areas.

Currently no Air Force air operations traverse any portion of the study area. Although flight training areas, routes, and airspace requirements of the military are subject to change and do change frequently, it is not anticipated that new routes will be established in the immediate future.

We are hopeful this information is useful in your planning. If additional information is needed, our staff point of contact is Mr. Raymond Bruntmyer, (214) 767-2514, or FTS 729-2514.

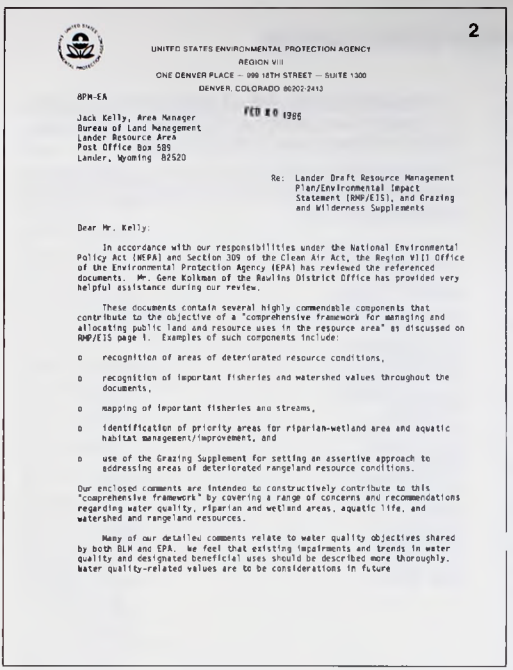
Sincerely

DON-MICHAEL BRADFORD, Major, USAF
Director, Environmental Planning Division

Cy to: HQ USAF/LEEV

Response to Letter 1

Thank you for your comments.



2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
ONE DENVER PLACE — 999 18TH STREET — SUITE 1300
DENVER, COLORADO 80202-2413

8PM-EA

FEB 10 1986

Jack Kelly, Area Manager
Bureau of Land Management
Lander Resource Area
Post Office Box 589
Lander, Wyoming 82520

Re: Lander Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS), and Grazing and Wilderness Supplements

Dear Mr. Kelly:

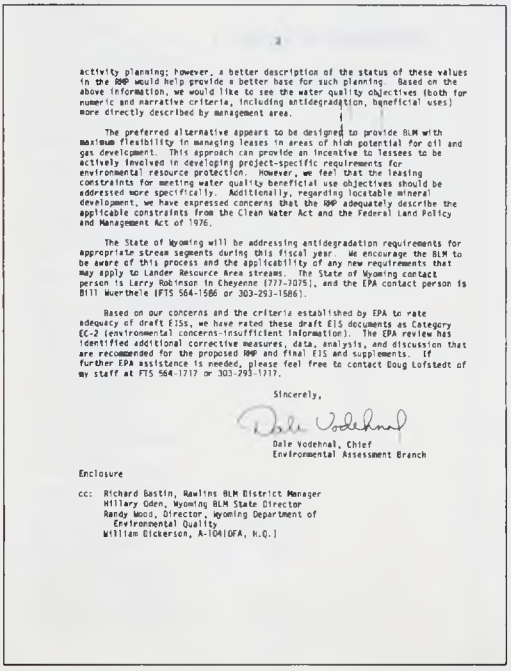
In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Region VIII Office of the Environmental Protection Agency (EPA) has reviewed the referenced documents. Mr. Gene Kolkman of the Rawlins District Office has provided very helpful assistance during our review.

These documents contain several highly commendable components that contribute to the objective of a "comprehensive framework for managing and allocating public land and resource uses in the resource area" as discussed on RMP/EIS page 1. Examples of such components include:

- o recognition of areas of deteriorated resource conditions,
- o recognition of important fisheries and watershed values throughout the documents,
- o mapping of important fisheries and streams,
- o identification of priority areas for riparian-wetland area and aquatic habitat management/improvement, and
- o use of the Grazing Supplement for setting an assertive approach to addressing areas of deteriorated rangeland resource conditions.

Our enclosed comments are intended to constructively contribute to this "comprehensive framework" by covering a range of concerns and recommendations regarding water quality, riparian and wetland areas, aquatic life, and watershed and rangeland resources.

Many of our detailed comments relate to water quality objectives shared by both BLM and EPA. We feel that existing impairments and trends in water quality and designated beneficial uses should be described more thoroughly. Water quality-related values are to be considerations in future



2

activity planning; however, a better description of the status of these values in the RMP would help provide a better base for such planning. Based on the above information, we would like to see the water quality objectives (both for numeric and narrative criteria, including antidegradation, beneficial uses) more directly described by management area.

The preferred alternative appears to be designed to provide BLM with maximum flexibility in managing leases in areas of high potential for oil and gas development. This approach can provide an incentive to lessees to be actively involved in developing project-specific requirements for environmental resource protection. However, we feel that the leasing constraints for meeting water quality beneficial use objectives should be addressed more specifically. Additionally, regarding locatable mineral development, we have expressed concerns that the RMP adequately describe the applicable constraints from the Clean Water Act and the Federal Land Policy and Management Act of 1976.

The State of Wyoming will be addressing antidegradation requirements for appropriate stream segments during this fiscal year. We encourage the BLM to be aware of this process and the applicability of any new requirements that may apply to Lander Resource Area streams. The State of Wyoming contact person is Larry Robinson in Cheyenne (777-7075), and the EPA contact person is Bill Wuerthele (FTS 564-1586 or 303-293-1586).

Based on our concerns and the criteria established by EPA to rate adequacy of draft EISs, we have rated these draft EIS documents as Category EC-2 (environmental concerns-insufficient information). The EPA review has identified additional corrective measures, data, analysis, and discussion that are recommended for the proposed RMP and final EIS and supplements. If further EPA assistance is needed, please feel free to contact Doug Lofstedt of my staff at FTS 564-1717 or 303-293-1717.

Sincerely,

Dale Vodehnal

Dale Vodehnal, Chief
Environmental Assessment Branch

Enclosure

cc: Richard Bastin, Rawlins BLM District Manager
Hillary Oden, Wyoming BLM State Director
Randy Wood, Director, Wyoming Department of Environmental Quality
William Dickerson, A-104[OFA, H.Q.]

Response to Letter 2

1. Thank you for your comments.

EPA DETAILED COMMENTS ON BLM DRAFT LANDER RESOURCE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT (RMP/EIS), AND GRAZING AND WILDERNESS SUPPLEMENT

Water Quality, Watershed, Aquatic Life

The RMP/EIS and supplements recognize water quality and fisheries throughout. Mapping and listing the affected fisheries (pages 81-92) is particularly commendable in establishing a framework for future activity planning. The discussion of existing chemical water quality monitoring on pages 76-79 needs to be correlated to the numeric criteria in the State water quality standards (WQS) for the streams. Existing impairments to WQS (numeric criteria and designated beneficial uses) and trends need to be documented as part of the affected environment. Such information should include condition and trend of any fisheries/aquatic life beneficial uses designated for the Lander Resource Area (LRA).

The RMP/EIS should address the consistency of the issue resolution determinations with EPA's current water quality standards regulation (40 CFR Part 131) which does not allow the state to remove a designated use if, 1) the use is existing (unless a use requiring more stringent criteria is added), or 2) if the designated use can be attained through required technology controls or best management practices (Part 131.10(h)). On page 79, the RMP/EIS states that "streams without a viable trout population, but with the potential to support trout, have not been discussed." However, if these streams fall into the second category above, i.e., are considered "attainable uses" as defined at 40 CFR Part 131.10(d), they should be addressed in the beneficial uses/WQS discussions.

The RMP/EIS should document BLM coordination with the State in addressing the management of any priority water bodies for the LRA that may have been identified in the most recent Section 305(b) water quality assessment report. The Grazing Supplement mentions an "informal agreement" with the Wyoming Department of Environmental Quality (WDEQ) for coordination in "solving water and air quality problems in the state" (page 48). The RMP/EIS and Grazing Supplement need to document the specific BLM-WDEQ coordination process, including provisions for periodic meetings for RMP follow-up, for setting watershed priorities, and for evaluating BMP effectiveness in meeting WQS. The Grazing Supplement also recognizes BLM consistency with completed 208 plans. However the status of the plans and BLM consistency requirements (as part of the comprehensive management framework) need documentation in both the RMP/EIS and Grazing Supplement.

Under the preferred alternative, "protection of streams, riparian areas, . . . could be significantly reduced on about 453,000 acres of high oil and gas potential" (page 44). The RMP needs to address the protection of water quality standards as a matter of policy for all alternatives during the leasing and lease development processes. Can measures other than no surface occupancy and seasonal restrictions be prescribed to provide the necessary water quality protection? In addition, the above direction appears to be contrary to BLM Manual 6740 which states BLM policy to: "A. Avoid the long- and short-term adverse impacts associated with destruction, loss, or degradation of wetland-riparian areas", and "C. Preserve and enhance the natural and beneficial values of wetland-riparian areas. . ." (Part. 06).

The preferred alternative (page 43 and elsewhere) would give considerable discretion to BLM to waive leasing requirements for resource protection. The RMP needs to address the public/inter-agency coordination process for such waivers when water quality standards (including beneficial uses) may be affected. Furthermore, the public/inter-agency coordination process for setting leasable mineral development requirements for resource protection in areas of high oil and gas potential needs to be described. What is the coordination process for setting locatable mineral development requirements?

Another mineral development concern that needs to be thoroughly "fleshed out" in the proposed RMP/final EIS is the legal resource degradation allowable under the 1872 Mining Law (page 195 and 276). The document states that "placer mining and dredging, which causes destruction or long-term degradation of a trout stream and riparian habitat, can legally occur" (page 195). The RMP/EIS needs to incorporate the requirements to protect WQS (both numeric and narrative criteria and beneficial uses such as for cold water fisheries) under the Clean Water Act (CWA) (Section 303(c) and 40 CFR Part 131) and EPA's antidegradation requirements. FLPMA requirements to comply with WQS (Section 202(c)(8)) and to prevent "unnecessary and undue degradation" (Section 302(b)) should also be incorporated. A CWA Section 404 dredge and fill permit or Section 402 point source NPDES discharge permit may be required for a particular operation. See U.S. v. Earth Sciences, Inc., 599 F. 2d 368 (10th Cir. 1979).

The use of watershed planning in the LRA for cumulative impact analysis and as a mechanism to coordinate site-specific project priorities and objectives for multiple use and/or multiple ownership watersheds should be addressed. What are the decision criteria for doing such plans vs. individual project activity plans? What are the watershed planning/treatment priority areas? Regarding the discussion of the Soil Conservation Service (SCS) on Grazing Supplement page 47, we believe that the discussion should be expanded to create a stronger framework for mixed ownership watershed planning and implementation.

We commend BLM for proposing a strong approach to improving deteriorated rangeland resource conditions, at least for Category I allotments, in the area covered by the Grazing Supplement (pages 33 through 44 and elsewhere). We would like to see the Supplement define in more detail the implementation strategy, particularly budgeting, needed to make the improvements happen.

We do not feel that ground water resources were sufficiently addressed; however, general management practices are discussed which relate to ground water protection. The draft RMP/EIS mentions that ground water resources, namely water wells and springs, may be affected by geophysical (seismic)

exploration. On page 60, the plan states that "shot-holes (from geophysical exploration) are plugged according to Wyoming Oil and Gas Conservation rules ...". These plugging practices should greatly enhance ground water protection.

Under EPA's rules for the Underground Injection Control Program [40 CFR Part 146.22(b)(1)], operators of injection wells must protect all fresh water aquifers (defined as any aquifer of 10,000 parts per million total dissolved solids or less) by setting surface casing with cement through all fresh water aquifers and into the underlying confining zone. We support consistency between EPA and BLM in protecting "fresh water aquifers" under the same definition. Consequently, further elaboration on BLM requirements for oil and gas leasing to protect "fresh water aquifers" is requested.

We suggest that the RMP describe the formal, predischarge coordination process between the Lander Resource Area and the Corps of Engineers (COE) in applying the Section 404 program on projects that would affect streams and wetlands under COE jurisdiction. Such factors as: notification of projects to be done under nationwide (or state or regional) 404 permit; identification of projects needing an individual permit; and development of mutually agreeable mitigation requirements for individual projects should be part of the description. We recommend that the coordination process include notifying the COE of all projects that would discharge dredged or fill material into streams, lakes, or wetlands. The COE will then determine whether an individual permit is required. In addition, the EPA is currently developing its wetland mitigation guidelines which will be forwarded to BLM when completed.

We suggest expanded use in the final RMP/EIS and grazing supplement of summary tables (such as Table 4-3) for comparing environmental consequences between alternatives. Our specific concern is to use the summary tables to consolidate environmental impact disclosure for water quality beneficial uses, watershed protection, and for air quality and air quality related values.

Riparian Areas - Wetlands

Areas of existing poor riparian area conditions are recognized in the RMP/EIS and Grazing Supplement. We commend BLM for addressing management direction to improve riparian and associated resources. Examples of such actions include the intent to develop "aquatic/riparian habitat management plans" for "parts of the upper Sweetwater River and Beaver Creek drainages and for the Green Mountain Area" (page 293), and to improve riparian areas in the Gas Hills grazing planning area. Are there to be demonstration areas? How many miles of improvement are targeted?

The RMP/EIS discusses habitat values of the resource area wetland-riparian areas. Waterfowl habitat condition is not expected to "improve significantly on Category I allotments" in the Gas Hills grazing

planning area, except for only small areas (Grazing Supplement page 39). This direction appears to contradict the fairly aggressive direction in the rest of the Supplement to correct degraded wetland-riparian conditions. Standards for wetland-riparian area restoration and improvements for the resource area need to be described. Examples include RMP guidelines for forage utilization rates and ecological conditions necessary for meeting water quality standards/ beneficial uses, streambank stability, and for wetland protection/ rehabilitation. Over-hanging vegetation is important to water quality and riparian condition. What are the LRA criteria for over-hanging vegetation? The resource area wetlands (including ephemeral and seasonal) should be more clearly located.

Logging within 100 feet of perennial streams would be allowed (page 36). More specific RMP stipulations and management criteria should be described that would provide adequate protection of riparian areas and associated aquatic systems from logging activities. What are the BMPs for controlling and revegetating riparian area disturbances? The acceptable percentage of tree removal under selective cutting methods for riparian areas should be stated. Additionally, the requirements for keeping logging roads out of wetland-riparian areas need to be identified.

Air Quality

Emissions of "potentially dangerous gases" from oil and gas wells are recognized on RMP/EIS pages 224 and 273. The flaring of sour gas at individual wells should be addressed. Flaring is a significant source of sulfur dioxide emissions at many Wyoming wellheads. It may contribute to acid deposition in nearby wilderness areas. The WDEQ is concerned about flaring in the well fields since it may represent a substantial portion of the total sulfur dioxide emissions from the natural gas industry in Wyoming. Currently, these emissions are not regulated by the State except possibly as open burning or emergency upsets, yet such emissions may in some instances be a routine, planned activity. It is recommended that the BLM [through RMP direction] include in its oil and gas leases a clause requiring that such emissions be quantified and reported.

Resource Monitoring

We realize that detailed resource monitoring requirements are usually developed at the activity planning stage. Due to the technical complexities involved in designing and implementing a monitoring program that adequately links watershed activities and water quality objectives (including antidegradation requirements and other narrative WQS such as for aquatic life, as well as numeric WQS), the RMP should be quite specific about BLM plans to conduct monitoring and evaluations to determine achievement of water quality objectives. We suggest that the following components of the comprehensive water quality monitoring strategy be addressed to the extent possible at this level of planning:

- goals and objectives,
- types of surveys (long-term, intensive) or assessments (including habitat evaluations and biomonitoring) to be used,
- parameters and frequency to be monitored and their suitability in achieving the monitoring goals and objectives,
- management and environmental indicators, e.g., aquatic habitat, sediment delivery, to be used in assessing impacts of past, ongoing, and proposed activities,
- use of activity monitoring in sensitive areas,
- monitoring responsibilities of BLM, mineral development lease/claim holders, and other state and federal agencies,
- mechanism for monitoring implementation,
- determination of adequacy of best management practices,
- reporting requirements.
- position or person responsible for monitoring program data collection, analysis, reporting, etc.,
- vegetation (including riparian area) monitoring intensity, type, and priorities,
- fisheries objectives, monitoring methodology, and threshold levels for modification in management direction,
- the feedback loop to achieve timely modifications to activities in response to monitoring results.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Endangered Species, Field Office
Federal Bldg., U.S. Courthouse
301 South Park
P.O. Box 10023
Helena, Montana 59626

3

IN REPLY REFER TO:

W.02 Lander RMP

December 15, 1988

MEMORANDUM

To: State Director, BLM, Wyoming State Office, Cheyenne, WY

From: Acting Field Supervisor, FWS, Endangered Species, Helena, MT

Subject: Lander Resource Management Plan Biological Assessment

We have reviewed your biological assessment (BA) and Lander Resource Management Plan (RMP) Final Environmental Impact Statement (FEIS). Based upon your commitments in the BA and FEIS to consult with us on future management actions, and the management actions discussed in the BA, we concur with your determination that the Lander RMP will not adversely affect the endangered bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), black-footed ferret (Mustela nigripes), and gray wolf (Canis lupus), or the threatened grizzly bear (Ursus arctos horribilis). We do have some concerns and recommendations, however, that we wish to bring to your attention.

We realize that the peregrine falcon, black-footed ferret, grizzly bear, and gray wolf are not currently known to occupy the Lander Resource Area (RA) and that there are limited recovery actions that you can be involved in at the present time. However, we were disappointed by the lack of specifics regarding threatened and endangered (T/E) species in the RMP. Section 7(a)(1) of the Endangered Species Act of 1973, as amended (ESA) directs Federal agencies to use their authorities to carry out programs for the conservation of T/E species. Furthermore, the RMP process provides the opportunity for the Bureau of Land Management (BLM) to set a positive management direction that will promote conservation and recovery of listed species. This is true not only for the bald eagle, which winters on the Lander RA, but also for the other four listed species.

Consultation on T/E species, pursuant to Section 7(a)(2) of ESA should be completed prior to issuance of the FEIS. The intent of Section 7 consultation is to insure that T/E species are considered, and that management actions to protect T/E species are incorporated early in project and resource planning processes.

The FEIS preferred alternative identifies the use of seasonal restrictions and "No Surface Occupancy" (NSO) stipulations to protect T/E species. NSO stipulations for water quality, fisheries, riparian areas, and big game winter ranges can also provide important protection to T/E species habitat and food supplies. We would be happy to work with you in developing such stipulations and can provide examples of stipulations used in T/E habitats.

Response to Letter 3

Thank your for your comments.

The BA states that specific habitat improvement projects for the bald eagle will be incorporated into the Red Canyon-Lander Slope Management Plan. Riparian wildlife habitat improvement projects and closure of the area to winter recreation activities may benefit the bald eagle. However, the FEIS also states that the area will be open for oil and gas (O/G) leasing. Exploration and drilling activities do have the potential to adversely impact bald eagles. Seasonal restrictions and NSO stipulations may be necessary to protect wintering eagles in this area.

We support your plans to initiate winter surveys, identify specific roost sites, and maintain and improve cottonwood communities on public lands. We also recommend constructing powerlines according to the specifications provided in the publication entitled "Suggested Practices for Raptor Protection on Powerlines - The State of the Art in 1981". If you do not have a copy of the publication, it can be obtained for $5.00 from:

Jim Fitzpatrick, Treasurer
Raptor Research Foundation
Carpenter St. Croix Nature Center
12805 St. Croix Trail
Hastings, Minnesota 55033

Peregrine falcons have successfully nested in Wyoming and Montana again since 1984, not 1985 as stated in the FEIS. As mentioned above, we are willing to assist you in developing conservation projects for the peregrine falcon in the Red Canyon-Lander Slope and the Sweetwater Canyon Wilderness Management Plans.

We encourage you to continue mapping prairie dog (Cynomys sp.) towns and conducting searches for black-footed ferrets. Although the BA states that the Lander RA does not intend to conduct any special management actions for the peregrine falcon, black-footed ferret, grizzly bear, or gray wolf unless those species are found on the Lander RA; you may wish to develop contingency plans for these species, so that response actions are already identified when these species occupy the Lander RA.

The FEIS discusses several species of rare plants that occur within the Lander RA and are candidate taxa (Federal Register 50(188):39526-39584). However, none of the species are currently proposed for listing under ESA. As you know, candidate species have no legal protection under ESA; but we recommend and support actions by Federal agencies to protect candidates, so that future listing actions will not be necessary. Your stated intent to develop management plans for Barneby's clover (Trifolium barnebyi) in the Red Canyon Management Unit, and for meadow pussytoes (Antennaria arcuata), small rockcress (Arabis pusilla), and William's rockcress (A. williamsii) in the South Pass Management Unit are positive steps in that direction. The Rocky Mountain Heritage Task Force conducted status surveys last summer on these four candidate plants. These reports may be helpful while developing your management plans. The Lander Grazing Supplement FEIS discusses the occurrence of Cryptantha subcapitata in the Wind River Canyon. The FEIS states that it is not a candidate species. This plant is classified as a category 2 candidate in Wyoming. We have no information on this plant, and would appreciate any information you can provide to us.

In summary, we have the following recommendations that should be pursued in the Lander RA:

1. Development of contingency plans, stipulations, and seasonal restrictions for the bald eagle, peregrine falcon, black-footed ferret, grizzly bear, and gray wolf;

2. Raptor proof all powerlines crossing the Lander RA;

3. Follow BLM and FWS guidance for impact assessment and surveys for black-footed ferrets;

4. Initiate informal Section 7 consultation early in project planning and prior to development of final plans.

We would appreciate the opportunity to be involved in the development of management plans and project activities at an early stage. We recommend that Bob Oakleaf (Wyoming Game and Fish Department nongame coordinator) be invited to participate in all T/E project planning. By incorporating T/E species review and analysis early in the planning process we can usually avoid delays and major modifications that may be necessary when T/E species are not considered until late in the planning process. Your efforts to consult early in future planning is appreciated.

cc: ES, FWS, Cheyenne, WY
WG&F, Lander, WY

CMT/clh

"Take Pride in America"

4

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
2120 Capitol Avenue, Room 7010
Cheyenne, Wyoming 82001

IN REPLY REFER TO:

February 13, 1986

Memorandum

To: Area Manager, Bureau of Land Management, Lander Resource Area, P.O. Box 589, Lander, Wyoming 82520

From: Project Leader, Ecological Services, Cheyenne, Wyoming

Subject: Review of Lander Resource Management Plan Draft Environmental Impact Statement (DEIS)

We have reviewed the subject Statement, and the following constitutes the comments of the U.S. Fish and Wildlife Service (FWS). We found that the DEIS identified most issues and offered management options under at least one of the proposed alternatives that would benefit wildlife. The mix of program objectives under the different alternatives, makes it difficult for us to support any one of the alternatives as stated. The preferred alternative appears reasonable in most cases; however, we are concerned with the relaxing of wildlife stipulations for oil and gas leases, and the magnitude of public lands disposal.

The status of local oil and gas industries is important, but protection of wildlife and aquatic resources should also be a primary consideration. The most important method for mitigating the impacts of oil and gas development involves good reclamation practices and avoidance of sensitive areas. Generally, on slopes of less than 15 percent gradient, successful reclamation can be expected, with success rates dropping dramatically on steeper slopes. With these points in mind, we strongly recommend limited development on slopes with more than 15 percent gradient and timely reclamation of disturbed areas. We also recommend that seismic operations be restricted to when the soil is dry or frozen to minimize vegetative cover loss and soil compaction. We also support Wyoming Game and Fish Department's recommendations that crucial elk winter ranges in the Lander Slope, Green Mountain, and Red Canyon management units carry a "no-surface occupancy" stipulation, and that the Whiskey Mountain bighorn sheep winter range and the East Fork elk winter range should be withdrawn from mineral (oil and gas) leasing as stipulated in existing BLM Cooperative Agreement and MMP's.

The DEIS contains many good, protective wildlife measures that should be incorporated into oil and gas leases to ensure adequate protection of important wildlife resources. We are, however, concerned with the reluctance of BLM to add restrictions to existing oil and gas leases and

the tendency to waiver existing no-surface occupancy and seasonal restrictions. It is difficult to understand why BLM cannot modify existing oil and gas leases to protect other natural resources. In this regard, we recommend that the statement on page 15 under "MINERALS" which indicates that BLM cannot unilaterally change the terms and conditions of existing leases, be further clarified by referencing regulations or legal opinions.

Pertaining to raptor protection, we recommend that the nests of the listed nonendangered raptor species receive the following seasonal nesting protection.

Golden eagle	February 15 - July 15
Osprey	April 15 - August 15
Prairie falcon	March 15 - August 1
Merlin	April 15 - August 15
Ferruginous hawk	March 15 - July 15
Cooper's hawk	April 1 - August 15
Burrowing owl	April 15 - July 15
Swainson's hawk	April 1 - July 15
Goshawk	March 1 - July 31
Red-tailed hawk	April 1 - July 15

Application of raptor nest protective measures is dependent upon adequate inventories to identify potential conflicts before surface disturbing activities are permitted. If adequate inventories are not available, as is the case in many portions of the Resource Area, we highly recommend that your wildlife staff conduct an on-site inspection of the project to ensure raptor nest protection. As a general guideline, we recommend that a three-quarter mile radius buffer zone be maintained around each raptor nest. Smaller buffer zones could be designated on a site-by-site basis after consultation among BLM, state, and FWS biologists. Topographic relief, vegetative density, or other circumstances may allow reduction of buffer zones in some situations.

A significant increase in timber harvest is proposed under the preferred management alternative to accelerate the rate to three or four times the sustained yield in order to salvage beetle-killed trees. We question the justification for this increased harvest, if it would be detrimental to fish and wildlife resources (i.e., cavity nesting birds and big game foraging sites). Timber sales should be keyed to a level of production which the resource can safely sustain and not at the expense of other resources.

The preferred alternative indicates that partial cutting will be allowed in stream zones. Due to the sensitivity and importance of these aquatic and riparian areas, we recommend that all timber harvest maintain a "no cutting" protective buffer zone of at least 100 feet, measured laterally, from both edges of all perennial streams. We support the objective of the Lander Slope management unit to maintain a ratio of 40

2

Response to Letter 4

Thank you for your comments.

percent cover to 60 percent forage on elk summer range. This cover/forage ratio should be a goal in the other timber management areas. All timber sales should also be coordinated with WGFD to protect and maintain important fish and wildlife resources.

We have serious concerns about your agency's plan to possibly dispose of 13,000 acres of public lands within the Lander Resource Area. Scattered parcels of public land can provide sanctuaries for wildlife in areas where the habitat values of private lands have been altered or severely impacted. Disposal of public lands may also severely impact the opportunity for outdoor recreation, such as hunting and fishing. Scattered land parcels may seem difficult to manage; however, a policy of letting many of these parcels remain natural or revert to natural conditions requires minimal BLM management. In cases where it is truly in the best interest of the public and resources associated with the land to dispose of a tract, we recommend an equitable land exchange rather than outright land sales. Land sales and exchanges could also influence FWS programs. Currently, land exchanges are one of the best methods for FWS to acquire needed lands. We are particularly interested in riparian and wetland areas that now support, or could be managed to support, waterfowl and migratory birds. In cases where the property does not fit our program needs, BLM has the responsibility to ensure protection of wetlands and riparian areas when they are transferred to the private sector, as required by Section 203 of FLPMA, Executive Order 11990, and Bureau policy as set forth in BLM Manual 6740.06(e)(1). Please keep this office abreast of plans to dispose or exchange any of the lands in question.

Grazing Alternative C seems to be the preferred alternative to protect wildlife resources. However, we believe that a more realistic alternative would be a combination of reduced livestock (Alternative C) and incorporation of the range improvements that would benefit wildlife contained in Alternative A.

A major concern to us is the existing condition of riparian and aquatic habitats in the Resource Area. The DEIS indicates (page 797) that poor riparian conditions are in evidence along many streams, and significant loss of woody riparian vegetation has occurred over the last 50 years in many areas from grazing, fire suppression, herbicide spraying, and lack of beaver management. The cummulative impacts table (page 50) reveals that little significant improvement could be expected for streams in the Gas Hill grazing area without a change in grazing management and that many overgrazed riparian zones in the Green Mountain grazing area would continue to remain below potential.

To maintain livestock forage production at the proposed higher level, intense management will be required to protect riparian zones, wetlands, and livestock forage production. We recommend that grazing pressure be limited to a 40 percent utilization level on riparian areas. However,

livestock access to riparian or streamside zone in fair-to-poor condition may still have to be restricted further to allow for woody vegetation recovery and maintenance. With respect to streambank stability, water quality, and the timing of grazing in the riparian zone, recent research by BLM in Wyoming indicates that stream banks are most unstable when soil moisture is highest; i.e., in the spring. Specifically, limiting cattle numbers in the riparian zone during spring did not significantly reduce the total amount of bank slumping caused by cattle, and water quality was adversely affected. We suggest that cattle be kept away from streams with unstable banks during seasons when soil moisture is high, until such time has elapsed that bank stability has been restored. We strongly recommend that sensitive areas be fenced to exclude cattle when the presence of cattle is shown to cause adverse impacts to water quality, stream bank stability, vegetation, as well as riparian shrub and tree regeneration. In addition, plans for managing livestock during drought years should be develc ed with full consideration for riparian and aquatic zones.

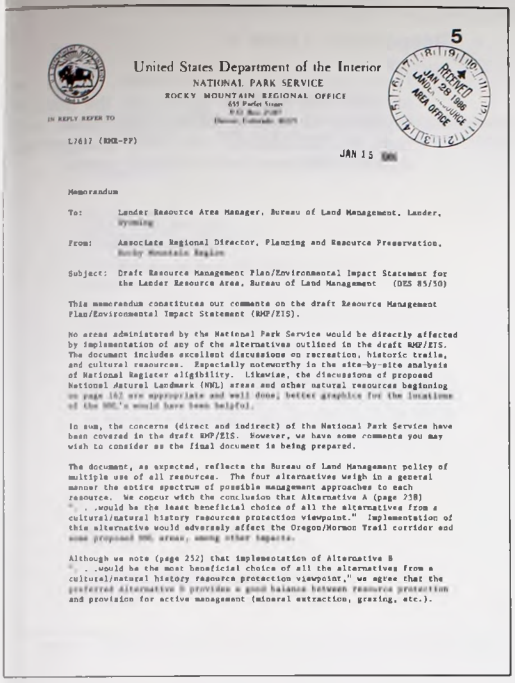
Another area of concern is proposed brush and noxious weed control in the vicinity of streams, sage grouse strutting grounds, and on wildlife winter range. We recommend a two-mile buffer zone that prohibits brush and noxious weed control around sage grouse strutting grounds to protect nesting and brooding areas. In addition, no brush control work should be conducted on wildlife wintering areas without concurrence of Wyoming Game and Fish Department (WGFD). Woody riparian vegetation should also be protected for its high value for fish and wildlife. In riparian areas, we recommend against the use of persistent water soluble herbicides such as Tordon, and that noxious weeds be treated with selective tools, such as the wick applicator. The use of Tordon adjacent to streams with reproducing populations of trout should not be considered. Research conducted by Dan Woodward of the FWS Field Research Laboratory, Jackson, Wyoming, indicates that Tordon is very toxic to young-of-the-year trout.

Coordination under provisions of Section 7 has not been completed between FS and BLM. Specific endangered species concerns or issues will be addressed by FWS at a later date through the consultation process. The Section 7, Endangered Species Act consultation should be included in the final EIS.

Thank you for the opportunity to comment on the DEIS. If you have any questions, we can be contacted at (307) 772-2374.

Arthur Anderson

cc:
Regional Director, FWS, Denver, CO (HR) MAILSTOP: 60100
Field Supervisor, FWS, Billings, MT (ES)
Team Leader, FWS, Helena, MT (SE)
Director, WGFD, Cheyenne, WY
State Director, BLM, Cheyenne, WY



5

United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
655 Parfet Street
P.O. Box 25287
Denver, Colorado 80225

IN REPLY REFER TO

L7617 (RMR-PP)

JAN 15 [illegible]

RECEIVED
JAN 25 1988
LANDS & MINERALS
BLM WYO. STATE OFFICE

Memorandum

To: Lander Resource Area Manager, Bureau of Land Management, Lander, Wyoming

From: Associate Regional Director, Planning and Resource Preservation, Rocky Mountain Region

Subject: Draft Resource Management Plan/Environmental Impact Statement for the Lander Resource Area, Bureau of Land Management (DES 85/50)

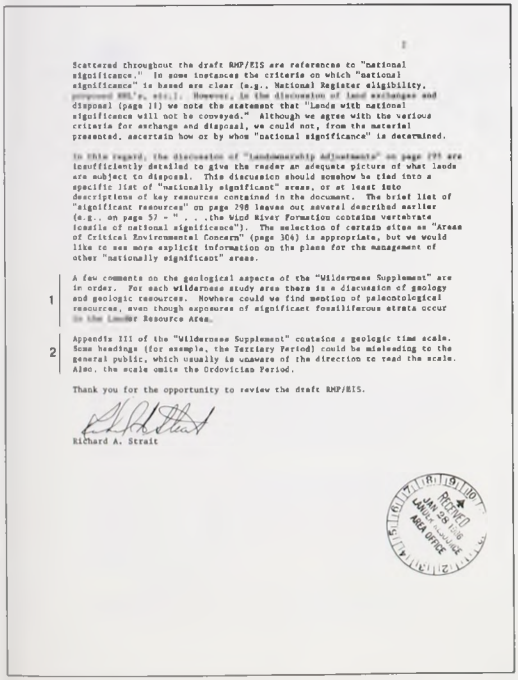
This memorandum constitutes our comments on the draft Resource Management Plan/Environmental Impact Statement (RMP/EIS).

No areas administered by the National Park Service would be directly affected by implementation of any of the alternatives outlined in the draft RMP/EIS. The document includes excellent discussions on recreation, historic trails, and cultural resources. Especially noteworthy is the site-by-site analysis of National Register eligibility. Likewise, the discussions of proposed National Natural Landmark (NNL) areas and other natural resources beginning on page 162 are appropriate and well done; better graphics for the locations of the NNL's would have been helpful.

In sum, the concerns (direct and indirect) of the National Park Service have been covered in the draft RMP/EIS. However, we have some comments you may wish to consider as the final document is being prepared.

The document, as expected, reflects the Bureau of Land Management policy of multiple use of all resources. The four alternatives weigh in a general manner the entire spectrum of possible management approaches to each resource. We concur with the conclusion that Alternative A (page 238) ". . .would be the least beneficial choice of all the alternatives from a cultural/natural history resources protection viewpoint." Implementation of this alternative would adversely affect the Oregon/Mormon Trail corridor and some proposed NNL areas, among other impacts.

Although we note (page 252) that implementation of Alternative B ". . .would be the most beneficial choice of all the alternatives from a cultural/natural history resource protection viewpoint," we agree that the preferred alternative D provides a good balance between resource protection and provision for active management (mineral extraction, grazing, etc.).



Scattered throughout the draft RMP/EIS are references to "national significance." In some instances the criteria on which "national significance" is based are clear (e.g., National Register eligibility, proposed NNL's, etc.). However, in the discussion of land exchanges and disposal (page 11) we note the statement that "Lands with national significance will not be conveyed." Although we agree with the various criteria for exchange and disposal, we could not, from the material presented, ascertain how or by whom "national significance" is determined.

In this regard, the discussion of "landownership adjustments" on page 295 are insufficiently detailed to give the reader an adequate picture of what lands are subject to disposal. This discussion should somehow be tied into a specific list of "nationally significant" areas, or at least into descriptions of key resources contained in the document. The brief list of "significant resources" on page 298 leaves out several described earlier (e.g., on page 57 - " . . .the Wind River Formation contains vertebrate fossils of national significance"). The selection of certain sites as "Areas of Critical Environmental Concern" (page 304) is appropriate, but we would like to see more explicit information on the plans for the management of other "nationally significant" areas.

1 A few comments on the geological aspects of the "Wilderness Supplement" are in order. For each wilderness study area there is a discussion of geology and geologic resources. Nowhere could we find mention of paleontological resources, even though exposures of significant fossiliferous strata occur in the Lander Resource Area.

2 Appendix III of the "Wilderness Supplement" contains a geologic time scale. Some headings (for example, the Tertiary Period) could be misleading to the general public, which usually is unaware of the direction to read the scale. Also, the scale omits the Ordovician Period.

Thank you for the opportunity to review the draft RMP/EIS.

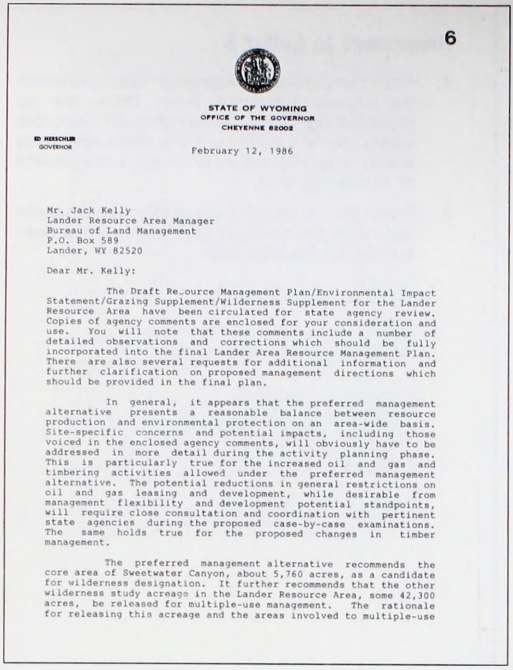
Richard A. Strait

RECEIVED
JAN 25 1988
LANDS & MINERALS
BLM WYO. STATE OFFICE

Responses to Letter 5

1. While there are paleontological resources within the Lander Resource Area, there are no recorded significant paleontological resources within any of the WSAs. Thus, these resources would be unaffected by wilderness designation or nondesignation.

2. Thank you for bringing to our attention the problems with the geologic time scale. It has been revised for the final EIS.



6

STATE OF WYOMING
OFFICE OF THE GOVERNOR
CHEYENNE 82002

ED HERSCHLER
GOVERNOR

February 12, 1986

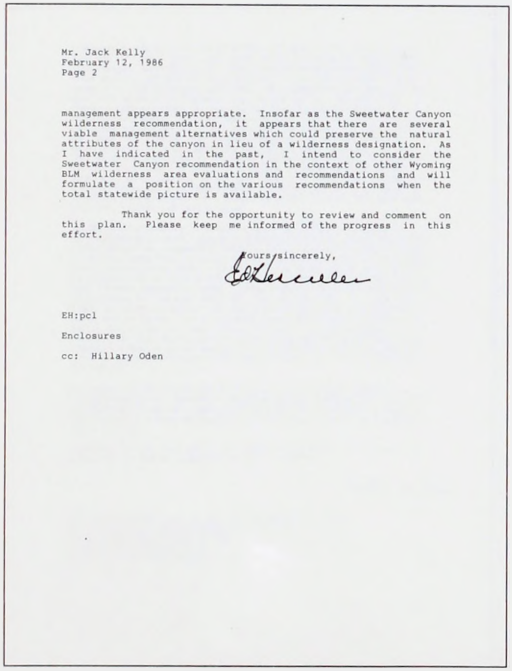
Mr. Jack Kelly
Lander Resource Area Manager
Bureau of Land Management
P.O. Box 589
Lander, WY 82520

Dear Mr. Kelly:

The Draft Resource Management Plan/Environmental Impact Statement/Grazing Supplement/Wilderness Supplement for the Lander Resource Area have been circulated for state agency review. Copies of agency comments are enclosed for your consideration and use. You will note that these comments include a number of detailed observations and corrections which should be fully incorporated into the final Lander Area Resource Management Plan. There are also several requests for additional information and further clarification on proposed management directions which should be provided in the final plan.

In general, it appears that the preferred management alternative presents a reasonable balance between resource production and environmental protection on an area-wide basis. Site-specific concerns and potential impacts, including those voiced in the enclosed agency comments, will obviously have to be addressed in more detail during the activity planning phase. This is particularly true for the increased oil and gas and timbering activities allowed under the preferred management alternative. The potential reductions in general restrictions on oil and gas leasing and development, while desirable from management flexibility and development potential standpoints, will require close consultation and coordination with pertinent state agencies during the proposed case-by-case examinations. The same holds true for the proposed changes in timber management.

The preferred management alternative recommends the core area of Sweetwater Canyon, about 5,760 acres, as a candidate for wilderness designation. It further recommends that the other wilderness study acreage in the Lander Resource Area, some 42,300 acres, be released for multiple-use management. The rationale for releasing this acreage and the areas involved to multiple-use



Mr. Jack Kelly
February 12, 1986
Page 2

management appears appropriate. Insofar as the Sweetwater Canyon wilderness recommendation, it appears that there are several viable management alternatives which could preserve the natural attributes of the canyon in lieu of a wilderness designation. As I have indicated in the past, I intend to consider the Sweetwater Canyon recommendation in the context of other Wyoming BLM wilderness area evaluations and recommendations and will formulate a position on the various recommendations when the total statewide picture is available.

Thank you for the opportunity to review and comment on this plan. Please keep me informed of the progress in this effort.

Yours sincerely,

Ed Herschler

EH:pcl

Enclosures

cc: Hillary Oden

Response to Letter 6

1. Thank you for your comments. Please be assured that BLM will work with the State of Wyoming regarding public comments, new resource information, use and management opportunities, and enhancement needs.

7

DEC 18 1985

Ed Herschler
Governor

Wyoming State
Archives, Museums & Historical Department

Barrett Building — State Historic Preservation Office — Cheyenne, WY 82002

Robert D. Bush, Ph. D.
Director
307-777-7519

December 17, 1985

Mr. Warren White
State Planning Coordinator
Herschler Building, 2nd Floor East
Cheyenne, Wyoming 82002

RE: §Draft Resource Management Plan for Land Resource Area--3 documents

Dear Mr. White:

Fred Chapman of our staff has received information concerning the aforementioned draft resource management plan. Thank you for giving us the opportunity to comment.

The documents under consideration acknowledge that intensive cultural resource surveys have not been conducted on all land within the federal study area. It is our policy to recommend the following action for areas not yet surveyed for cultural resources. Prior to any ground disturbing activity, an on-site cultural resource survey of the project area should be conducted and adverse impacts to any significant cultural resource sites must be mitigated. The survey and any necessary mitigation measures must be conducted by a professionally qualified archeologist or historian. A report detailing the results of these efforts must be reviewed by SHPO staff prior to our commenting on the project's effects on cultural resource sites.

If you have any questions please contact Mr. Chapman at 777-6530.

Sincerely,

Mark Jonge
Deputy SHPO

FOR:
Dr. Robert D. Bush, Ph.D.
State Historic Preservation Officer

MGJ:FC:klm

Frank Sherrow, Chairman, Cowper — Loretta Stanfield, Vice-Chairman, Kemmerer — Bill Bruce Bloor, Gillette — Thomas J. Hooper, Laramie — Gladys G. Hill, Douglas — Mary Surdyk, Rawlins — Dora Pooley, Cheyenne — Mary Guthrie, Cheyenne — Morton Baumgartner, Worland

8

THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

JAN 21 1986

State Engineer's Office

HERSCHLER BUILDING — CHEYENNE, WYOMING 82002

January 16, 1986

MEMORANDUM

TO: Paul Cleary, Natural Resources Analyst
State Planning Coordinator's Office

FROM: Louis E. Allen, Water Resources Engineer

SUBJECT: State Identifier No. 84-138; Lander Resource Area Management Plan Draft EIS, and Wilderness Supplement Draft EIS; BLM, 1985.

We have a few comments to offer after review of the three subject DEIS's. The draft plan appears to generally reflect good management practices for multiple uses of the Resources Area.

Resource Management Plan DEIS

1. Page 76, Water Rights. Relative to the water rights adjudication in the Big Horn River System, actually the proceedings in Water Division III are still continuing and the material in this report is not current. The BLM water uses that were not under State Engineer permit have now been adjudicated by stipulated decree dated February 9, 1983. BLM water rights with State Engineer permits that are unadjudicated will be subject to the ongoing review and adjudication process of all remaining State-awarded permits.

2. Pages 76-77, Water Rights. The discussion of the Sweetwater River, tributary of the North Platte River, contains errors and apparent confusion. The North Platte River is not under a Compact between Nebraska and Wyoming. The natural flow of the North Platte River is apportioned among the States of Colorado, Wyoming, and Nebraska under a U.S. Supreme Court Decree (1945) and an Order modifying the Decree (1952). The Sweetwater River would be included under a section limiting storage of water in Wyoming for irrigation on the North Platte River or its tributaries above Pathfinder Reservoir to 18,000 acre-feet.

The limitation of 168,000 acres of land being irrigated, as noted on page 77, is correct. The mentioned "157,000 acres" being irrigated is questionable. We consider the full 168,000 acre limit as being under irrigation in any one year. However, 157,000 acres

Response to Letter 7

Thank you for your comments.

Responses to Letter 8

1. Wilderness designation would preclude water impoundments and diversions within the area. It would also require that high water quality be maintained. It is unlikely that such a transbasin water diversion as you suggest would need physical facilities in the WSA or adversely affect water quality.
2. This section has been deleted from the final EIS.

and 18,000 acre-feet are not additive, as suggested in the paragraph text. Since the limitations on irrigation and on water storage for irrigation are considered to have been reached, no new permits for irrigation or irrigation water storage have been issued for a number of years. The Decree does provide for "ordinary and usual" water developments for "domestic, municipal and stock watering purposes and consumption" and, with the proper State Engineer permits, some of these small uses may yet be allowed.

Although this section is titled "Water Rights", there is no mention of State laws requiring State Engineer permits for the diversion, storage, or use of the State's surface or underground waters. The appropriate State Engineer permit must be obtained prior to commencing construction for a proposed water use, and without the permit, no water right can exist.

Grazing Supplement DEIS

3. Page 9, Water Developments. This is an appropriate place to mention that a State Engineer permit is needed prior to commencing construction of a proposed development of the State's water for any purpose. Water developments are mentioned numerous times in subsequent pages and the necessity for the appropriate State Engineer permit for each development, whether of surface water or underground water, needs to be brought out.

4. Page 40, 2nd col., 3rd par. Larger reservoirs for stockwater are suggested so as to include fishery benefits. Assuming a sufficient water supply for the priority date of the reservoir, there may be a problem in the Sweetwater River drainage under the North Platte River Decree for such use. The question would arise over whether this was an "ordinary and usual" use of water for "domestic, municipal and stock watering purposes".

5. Appendix A, Green Mountain Study Area, page 9, 6th par. In this context, we suggest adding "under the appropriate State Engineer permits" following "developed" at the end of the first sentence.

Wilderness Supplement DEIS

6. Summary, pages vii-viii. We concur with the Proposed Action for the Sweetwater Rocks WSA's and the Copper Mountain WSA, which is to not designate them as wilderness areas but to manage them

under multiple-use policies. We appreciate the reduction in size of the Sweetwater Canyon WSA Proposed Action to 5760 acres of the canyon proper proposed for wilderness designation, with release of 3200 acres for multiple-use management. There have been proposals for a transbasin diversion of water from the Green River drainage to the North Platte River utilizing the Sweetwater River for conveyance. We would prefer non-wilderness designation for this WSA so that options could be kept open for such water developments.

1

7. Page 46, continued to page 48. This paragraph refers to six designated National Forest wilderness areas in connection with the 1964 Wilderness Act. Following the passage of the Wyoming Wilderness Act of 1984, the Cloud Peak Wilderness Area in the Bighorn Mountains was designated, adding some lands to what was formerly the Cloud Peak Primitive Area. This area should be noted, as it is only a short distance from the Copper Mountain WSA.

2

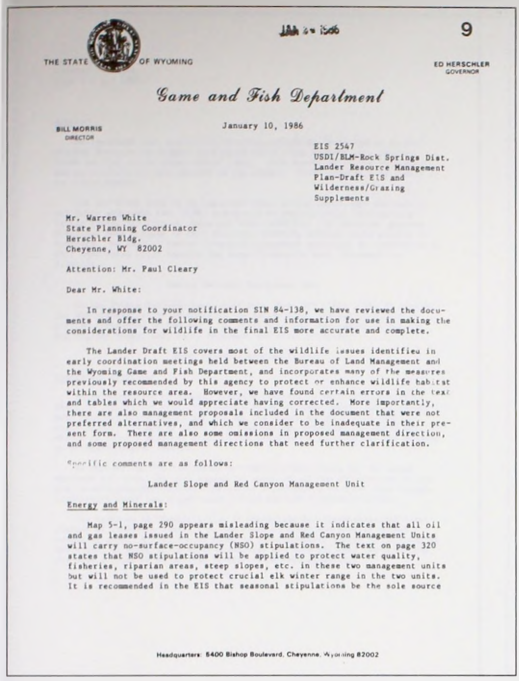
The six wilderness areas noted above are referred to again in Appendix V, page 127, 1st col., 2nd par. It seems the document should be brought up-to-date by including the designations of the Wyoming Wilderness Act of 1984, which does not appear to be mentioned anywhere.

Thank you for the opportunity to review these DEIS's. Your referral memorandum is being returned as requested.

LEA/ht

cc: George L. Christopulos
State Engineer

Gordon W. Fassett
Deputy State Engineer



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

9

Game and Fish Department

BILL MORRIS
DIRECTOR

January 10, 1986

EIS 2547
USDI/BLM-Rock Springs Dist.
Lander Resource Management
Plan-Draft EIS and
Wilderness/Grazing
Supplements

Mr. Warren White
State Planning Coordinator
Herschler Bldg.
Cheyenne, Wy 82002

Attention: Mr. Paul Cleary

Dear Mr. White:

In response to your notification SIN 84-138, we have reviewed the documents and offer the following comments and information for use in making the considerations for wildlife in the final EIS more accurate and complete.

The Lander Draft EIS covers most of the wildlife issues identified in early coordination meetings held between the Bureau of Land Management and the Wyoming Game and Fish Department, and incorporates many of the measures previously recommended by this agency to protect or enhance wildlife habitat within the resource area. However, we have found certain errors in the text and tables which we would appreciate having corrected. More importantly, there are also management proposals included in the document that were not preferred alternatives, and which we consider to be inadequate in their present form. There are also some omissions in proposed management direction, and some proposed management directions that need further clarification.

Specific comments are as follows:

Lander Slope and Red Canyon Management Unit

Energy and Minerals:

Map 5-1, page 290 appears misleading because it indicates that all oil and gas leases issued in the Lander Slope and Red Canyon Management Units will carry no-surface-occupancy (NSO) stipulations. The text on page 320 states that NSO stipulations will be applied to protect water quality, fisheries, riparian areas, steep slopes, etc. in these two management units but will not be used to protect crucial elk winter range in the two units. It is recommended in the EIS that seasonal stipulations be the sole source

Headquarters: 5400 Bishop Boulevard, Cheyenne, Wyoming 82002

of protection for crucial wildlife habitats. The discussion on page 320 of the EIS indicates the NSO stipulation does not apply to the entire Lander Slope or Red Canyon Management Units, as suggested by Map 5-1. In fact, one of the most important surface resource values in these two units - crucial elk winter range - will not receive any protection from oil and gas exploration and development. Such development could eliminate or seriously reduce that habitat.

Any loss of crucial elk winter range in the Lander Slope or Red Canyon Management Units will have a serious negative impact on both the Lander elk herd and the Lander mule deer herd, because previous extensive subdivision development all along the lower edge of the elk winter range, as well as into the heart of the winter range, has reduced the acreage available to wintering elk to the minimum amount needed to sustain current population objectives. Seasonal restrictions will not prevent loss of crucial elk winter range to oil and gas exploration and/or development. The area within these two management units has low potential for oil and gas development. A no-surface-occupancy-stipulation would allow limited exploration if interest in the area picks up. More importantly, it should prevent the loss of crucial elk winter range needed to maintain the population objective for the Lander elk herd. Withdrawal of crucial elk winter range from future oil and gas leasing would be even better because of the tenuous nature of the administration NSO stipulation. As a minimum protection measure, we recommend the NSO stipulation be applied to any oil and gas leases issued on crucial elk winter range in the Lander Slope and Red Canyon Management Units.

Phosphates: The draft EIS also recommends that leasing, prospecting and exploration for phosphates be allowed in the Lander Slope Management Unit (page 320). This recommendation would be detrimental to wildlife for the same reasons explained in the above comments for oil and gas leasing in the Lander Slope Unit. The EIS points out that phosphate reserves occur only in thin seams and have low development potential. In fact, the last company to hold leases in the area let them expire last year. The potential destruction of crucial winter range as a result of phosphate prospecting and exploration on the Lander Slope is not compatible with the high recreational and wildlife values of the area. We recommend that crucial elk winter ranges within the Lander Slope Management Unit be withdrawn from phosphate leasing, exploration, and development, as recommended for the Red Canyon Management Unit in the draft EIS.

Forest Management:

The forest management discussion on pages 119-131 of the EIS points out that the proposed management direction is to accelerate the rate of cutting of timber to three or four times the sustainable yield of 1 MMBF, in order

Responses to Letter 9

1. Thank you for your comment. We have adopted your suggestion to use a block pattern using traditional quarter section lines for the Sweetwater Canyon Proposed Action.
2. It is true that a wilderness designation would restrict certain types of wildlife projects. A wilderness designation would not significantly restrict hunter access into the Sweetwater Rocks WSAs.
3. The section you refer to has been deleted from the final EIS.
4. The Lankin Creek (1622) and Jamerman Pastures (1623) allotments are within the Green Mountain EIS area, and the final text has been changed to correct this error.

   The Diamond Springs Allotment (1509) is not contiguous to or partially contained within the WSA boundaries. The southern boundary of allotment 1509 is in the center of sections, 10, 11, and 12, T. 30 N., R. 90 W. This boundary is approximately 2½ miles north of the Lankin Dome WSA boundary; thus, it is not discussed in the "Affected Environment" section.
5. This section has been rewritten.
6. We have added a reference to the pronghorn crucial winter range.
7. See response 4 above.

to salvage the large volume of beetle-killed trees and meet the current high demand. However, this suggests that within thirty to forty years there will be no harvestable timber on suitable timber harvest acres within the resource area. This situation will have to last up to 50 years to give the first acres cut in the 30 to 40 year cutting cycle at least 80 years to reach saw timber size. An 80 year rotation is probably too short. Yet, nowhere does the EIS point out that under this type of harvest schedule, companies harvesting timber will have to find other sources of timber to sustain their operations in thirty or forty years or go out of business. In addition, the EIS does not clearly explain how adequate elk and deer cover will be maintained in management units supporting harvestable timber. We suggest the EIS clarify how elk and deer cover will be managed under the proposed accelerated timber harvest on Green Mountain, South Pass, Lander Slope, Red Canyon and Dubois Management Units. Only in the Lander Slope Management Unit Forest Management discussion (page 321) is there mention of an attempt to maintain a ratio of 40% cover to 60% forage on elk summer range where timber harvest is planned. This cover/forage ratio should be an approximate goal in all timbered areas supporting spring/summer/fall elk range.

Road Management:

Although summer elk range occurs within the resource area, there is no mention of open road density standards within the EIS. Seasonal closures to protect wintering deer and elk are excellent, but open road density standards need to be applied to those spring/summer/fall elk ranges within the Lander Resource Area in Green Mountain, Limestone Mountain, Peabody Ridge, Mormon Basin, etc. With the possible exception of large scale habitat type conversions, open road density and use of those roads has the greatest potential for negatively impacting elk summer range. Location of new roads, in relation to existing vegetation and topography, is very important if cover values are to be maintained. In addition, there should be an average open road density of no more than 1.2 miles per section of forest cover in any timber compartment or fourth order watershed and a maximum of no more than 2 miles of open road in any section of forest habitat if the area is to be maintained as good elk habitat (Hoover and Wills, 1984). We recommend that these be used as maximum open road density standards for all road management plans affecting elk spring/summer/fall ranges within the resource area.

East Fork and Whiskey Management Units

Energy and Minerals:

Oil and Gas: Page 341 - Map 5-2C East Fork and Page 350 - Map 5-32 Whiskey Mountain. BLM State Directors, over the years since 1969, have signed several documents which clearly state that the preferred management

direction on the Whiskey Mountain bighorn sheep winter range and the East Fork elk winter range should include no leasing of minerals, and that both these areas should be withdrawn from mineral (oil and gas) leasing in order to protect wildlife values of these two areas. The 1969 Cooperative Agreement signed by the BLM, Wyoming Game and Fish Dept., and the USFS for the management of Whiskey Mountain, as well as the most recent edition of the Whiskey Mountain HMP (which was also signed by the Rawlins District Manager of the BLM) recommends no mineral leasing in this area and the pursual of a mineral withdrawal. In the 1969 agreement, 2,599 acres were segregated to prevent mineral leasing in 1970. The Cooperative Management Agreement for the East Fork winter range signed by the State Director of the BLM in 1981 recommended the same mineral management action for the East Fork winter range. On page 293 of this EIS, the "BLM would..." under the "...preferred alternative...continue to uphold its commitments made through cooperative agreements." It is our interpretation that cooperative management plans and memorandas of understanding would be those long-standing plans and agreements concerning the Red Canyon, East Fork big game winter ranges and the Whiskey Mountain bighorn sheep winter range. Instead, the EIS recommends leasing of minerals in these two areas. This contradicts all previous agreements. Although a NSO stipulation is recommended for all leases granted in these areas, we do not feel this concession meets the intent of past agreements. We feel the decision presented in the draft EIS to lease minerals on the Whiskey Mountain and East Fork Units, despite all previous recommendations and signed cooperative agreements, to be counterproductive. The wildlife values on these two units have national significance and are vital to the long term economic stability of the Dubois area. The only sure way to provide long term protection of these values from oil and gas exploration and development impacts is to withdraw these areas from mineral leasing as recommended in the existing Cooperative Agreement and HMPs that have been signed by State Directors of BLM. We strongly recommend this decision be incorporated into the Lander RMP EIS. These areas have no, low or at best moderate, oil and gas potential and the acres that should be withdrawn represent less than 2% of that portion of resource area recommended for oil and gas leasing (2,480,000 acres) in the draft EIS.

Fish and Wildlife:

Page 293 (mentioned before under mineral leasing) Paragraph 4. This statement has been contradicted by statements in the Energy and Mineral section of this draft. It appears that agreements made by the BLM with the Fish and Wildlife Service and the Wyoming Game and Fish Department would no longer be in effect. We certainly hope this is not the intent, and recommend this be clarified.

Access:

We recommend that aquisition of public access be investigated in the Whiskey Mountain Management Unit which would allow hunters into the Red Creek portion of the sheep winter range. This access is needed to properly manage wildlife in this section of the county. There presently is little or no public access.

The Red Creek area is an important sheep winter range, yet the cattle and horse allotment (No. 2126) appears to be heavily used, leaving very little forage for bighorn sheep and other wildlife. If livestock grazing practices were changed in this drainage, wildlife habitat would greatly be improved. We suggest better livestock management practices be considered in this area which could improve the range to benefit both livestock and wildlife.

Dubois Badlands Management Unit

In the Dubois Badlands Management Unit, Page 346 - Map 5-29, we suggest the NSO stipulation be extended to the entire area, instead of just that portion designated on the map. The whole area provides important habitat for bighorn sheep, elk, deer, antelope, and other wildlife.

Green Mountain Management Unit

Energy and Minerals:

Areas identified as crucial wildlife habitats in this unit show that there is significant wildlife resource value on those lands, and we recommend seasonal stipulations for oil and gas leases be applied to protect those values. In KGS or areas with high oil/gas potential, we would not object to waiving seasonal stipulations where it is possible for the company to mitigate adverse impacts.

We support the NSO limitation on crucial winter range for the Green Mountain elk herd. We also suggest at least one of the alternatives to the plan should consider limited time-period stipulations in order that seismic exploration would avoid peak recreational periods on Green Mountain.

The decision to require a plan of operations for exploration and development of locatable minerals on the Green Mountain elk crucial winter ranges is good. Mitigation of wildlife losses/impacts should be included in the plan. In order to maintain objectives for this elk herd, we recommend the same protection be applied to identified calving habitat.

Forest Management:

Of three different timber harvest levels considered on Green Mountain, the median level of 3.5 - 4.0 MMBF has been chosen. The actual amount of timber harvested is of less importance to wildlife than the design of the cuts and the means used to access and remove the timber. The idea of compartment development to isolate disturbances is good, but impacts on wildlife will depend on the sizes of the compartments, the rate of cut, the success of regeneration, the maintenance of adequate thermal and escape cover, and the success of road closures following timber removal. We suggest clearcuts be irregular in shape, less than 35 acres in size, and designed to maximize edge.

Timber harvest by compartments would produce less "edge" than scattering smaller cuts over the entire mountain, but it also would reduce the area affected by human disturbances. Maintenance of adequate foraging areas for elk and deer could be effected by controlled burns in other compartments, to offset the losses in cut compartments.

Landownership Adjustments and Utility Systems:

On the Green Mountain Management Unit, changing ownership of Tract 135 would present no wildlife problems if it were traded for some of the smaller 40-acre private tracts on the mountain. Tract 134 is accessed by the Green Mountain Loop Road and could be developed for recreational homesites if sold. We would agree to this tract being traded, preferably for land elsewhere on the same road and adjacent to other BLM lands (such as in Sections 27,29,9, or 4 of T28N, R81W).

Recreation:

The proposal to maintain existing recreational facilities on Green Mountain, and rehabilitate and reclaim disturbed and hazardous areas is a good one and we support it. We recommend the Split Rock and Devil's Gate sites also be maintained.

Recommended restrictions on ORV use are good. We are glad to see that "picking up big game kills" is a necessary task that is exempt from the existing restrictions.

We strongly support the recommended search for public access on roads listed in Table 5-2. Access through Beef Gap and Wolf Gap roads would be especially beneficial in meeting wildlife objectives. If public access for that portion of the Bison Basin Road from Sweetwater Station to Bison Basin is not a fact, we suggest obtaining legal access also be considered in this plan.

Beaver Creek Management Unit

In the Beaver Creek Management Unit, we suggest tracts 124, 127, and 133 be traded for land that adjoins existing BLM land.

Gas Hills Management Unit

In the Gas Hills Management Unit, a number of tracts are proposed for sale or exchange. We do have some concerns with several of these tracts, and feel retention in public ownership would benefit both wildlife and public access. Tracts 137 and 138 are isolated from other BLM lands, but adjoin a state section that abuts a solid block of BLM land. These two tracts only appear isolated on the RMP map because they are on the border of the Gas Hills Management Unit (part of tract 137 is actually in the Beaver Creek Management Unit). Tract 150 abuts Pathfinder National Wildlife Refuge and we recommend it also be retained in public ownership. If the BLM no longer wants to manage that tract, we suggest a transfer to the Fish and Wildlife Service be evaluated. Tracts 158 and 159 are isolated, but each is accessed by the Turkey Track Road (Natrona County Road 322) and could possibly be traded rather than sold, thereby assisting in meeting BLM access acquisition objectives in the area.

Fire Management:

Whiskey Mountain:

We feel that full suppression for fire management on Whiskey Mountain is not a preferred alternative. Fire is probably one of the best habitat management tools for improving bighorn sheep habitat. We do not feel full suppression of fire to be compatible with the overriding BLM objective for the Whiskey Mountain area: to promote and perpetuate bighorn sheep habitat in cooperation with the Wyoming Game and Fish Department, U. S. Forest Service through the 1969 Whiskey Mountain Cooperative Agreement. Pages 130, 196, and 202, contain a very good summary of the benefits of fire to wildlife and habitat. Additional benefits of fire for bighorn sheep are the opening up and maintaining the open nature of migration routes through conifers, opening up feeding areas that have been grown over by conifers and/or tall brush, providing early spring and late fall greenup that attracts use and increases nutritional level, and saving money and manpower. The Wyoming Game and Fish, in cooperation with the BLM, has a prescribed burn planned for 1986 to improve sheep habitat. Several other burns are planned for the future in mainly conifer or old burn areas.

We also feel the BLM's preferred alternative for full fire suppression on Whiskey Mountain is contrary to the Shoshone Forest Plan to allow natural fires to occur in the immediately adjacent Fitzpatrick Wilderness to improve bighorn sheep habitat. Since the BLM and U.S.F.S. have overriding objectives to improve and maintain sheep habitat through the Whiskey Mountain

Cooperative Agreement, it seems to us to be counterproductive, and in conflict with that agreement, for the BLM to support full fire suppression in this area. It seems more appropriate to this agency that the cooperative protective agreement for initial attack with the U. S. Forest Service, page 355, should be revised so as to not conflict with the Whiskey Mountain Cooperative Agreement.

In summation, we feel the Whiskey Mountain area should have a very limited fire suppression preferred alternative, especially in the conifered areas. We also feel a cooperative plan should be developed for this area showing specific sites that would benefit from fire, (both natural and prescribed), and allow these areas to burn if public safety, protection of private property, and other resource values are not an issue.

South Pass:

Page 329, it is stated that prescribed burns will be used to enhance certain vegetative types such as aspen, willow-riparian, shrubs, and conifers especially for moose habitat. These are very good objectives, however, it is very inconsistent under Fire Management to choose a preferred alternative that supports full fire suppression. We suggest the designation of areas that could benefit from limited or no fire suppression, to accomplish the objectives for wildlife set forth for prescribed burns. Fire suppression, in many cases, has prevented natural rehabilitation of our aspen clones, willow patches, numerous other shrubs, and conifers to the detriment of wildlife habitat.

Off-Road Vehicles:

Dubois Badlands:

We support the preferred alternative to close the entire unit to off-road vehicle (ORV) use. This is compatible with our sheep herd objectives for this area. Excessive ORV use could be very detrimental to the yearlong sheep habitat of this area, especially during critical times such as lambing, nursing, winter, etc. It would also be very destructive to the fragile soils and vegetation of the area.

Whiskey Mountain:

We support the preferred alternative to limit vehicle use to designated roads and vehicle routes and impose seasonal closures in some areas. We feel local public hearings should be held on proposed road closures, prior to implementation.

Specific Comments on the Resource Management Plan and Draft EIS, in Order of Pagination of the Document:

1. Page 27: Wildlife and Fisheries Program, General, 3rd paragraph: We are pleased to see that bridges and culverts will be designed and installed to maintain adequate fish passage. However, bottomless arch structures are preferred over the use of culverts.

2. Page 33: Technically, the potential reintroduction of bighorn sheep into the Sweetwater Rocks should be listed under Alternative A, Existing Management, because existing managers have agreed to follow the Game and Fish lead in this matter.

3. Page 39: In the ORV plan, snowmobiles are treated separately from other ORVs in seasonal closures on Green Mountain and the Lander Slope. We would prefer the plan also specify how other snow-traveling vehicles (such as three-wheelers) are to be treated.

4. Page 44 and 45: Table 2-3, II. Fish and Wildlife: With the exception of that segment which addresses mineral exploration (top of page 45), we support Alternative A of II - Fish and Wildlife, as it offers the most protection for fisheries resources. Although we are not entirely in agreement with any of the segments that address mineral exploration under the four alternatives in II - Fish and Wildlife, fisheries impacts would probably be fewer with the Preferred Alternative.

5. Page 60: The discussion of the effects of oil and gas development on the environment suggests that disturbed acres are reclaimed within three to five years to near original conditions. This is accurate only in those instances where soil and moisture conditions are ideal. On most disturbed sites it will take well over ten years to see vegetation reestablished near the original condition. There are several examples in the Resource Area where reclamation attempts have been nearly total failures. The EIS greatly overstates the rate at which disturbed lands can be reclaimed. We suggest this portion of the EIS be more realistically addressed.

6. Page 84: Tables 3-8: There is an error in the fish species listed for Big and Little Hermit Gulch. Game fish present in Big Hermit Gulch should be rainbow and cutthroat trout, while in Little Hermit Gulch, game fish present should be cutthroat trout rather than rainbow trout.

7. Page 97: Map 3-16, Elk Herd Unit boundaries, has a couple errors on it. The map incorrectly shows a portion of the Ferris herd unit lying east of the Rattlesnake herd unit and north of Wyoming Highway 220. Also, the line between the Shamrock and Steamboat elk herds is the Wamsutter-Crooks Gap Road, not the Bison Basin Road as shown on the map.

8. Page 98: Map 3-17, Mule Deer Herd Unit boundaries are out of date and do not show current herd unit boundaries for the Sweetwater herd unit. This will now be herd number 46.

9. Page 100: Map 3-19, Bighorn Sheep Herd Unit boundaries, omits the small corner of the Ferris herd unit in the southeast corner of the resource area. The boundary of bighorn sheep Area 22 follows the forest southern boundary. Above this is Area #4, Younts Peak.

10. Page 107: Map 3-26, Sage Grouse Breeding-Nesting Areas fails to show the lek/nesting complex for Eagles Nest Reservoir at NE 18, T25N, R93W.

11. Page 108: On Table 3-11, the following correction should be made: Lander "Approximate % of Population in Lander R.A." changed to 95%.

    Wiggins Fork (No. 35) Population objective changed to 4,000.
    Warm Spring (No. 36) Population objective changed to 800.
    Steamboat (No. 26) Population objective changed to 500.

12. Page 110: Table 3-13, Mule Deer Herd Unit Data, needs to be updated to reflect herd unit changes made when the Sweetwater herd unit was created from Areas 96 and 97. Figures as presented in this table for the Green Mountain and Beaver Rim herd units are in error (and Green Mountain should be replaced by "Sweetwater").

13. Page 113: In the leading paragraph on bighorn sheep habitat requirements, the plan states that forbs and grasses are the major diet components "from late fall to early summer." This should be "from early summer to late fall."

14. Page 118: In the section on bald eagles, the plan fails to mention wintering bald eagles observed using the lower portions of the Sweetwater River near Devil's Gate. In addition, a pair of bald eagles are known to winter on the Wind River below the town of Dubois and above the Indian reservation boundary.

15. Page 127: Access, Green Mountain Management Unit, 5th paragraph: Monitoring stations were established to check on siltation, but only visual observations were made. Most of the siltation entering East Cottonwood Creek was coming from the logging road and the Green Mountain loop road.

16. Page 131: Under Dubois Area Management Unit, another area that would benefit from prescribed burning are various timbered stands.

17. Page 133: The discussion on this page of hunting recreation in the resource area points out the importance of big game hunting, but does not address hunting recreation provided by upland game, game birds, and

waterfowl. The Sweetwater River drainage within the resource area is an important sage grouse hunting area. There has been an average annual harvest of nearly 10,000 sage grouse and an annual average of 5,000 sage grouse hunter recreation days over the past three years in this area. These levels of harvest and recreation days are surpassed by only one other area in the state. Recreation provided by game birds and waterfowl in the Lander Resource Area should be pointed out in the EIS in conjunction with big game hunting values.

18. Page 134: Snowmobiling is not a primary recreation activity on Whiskey Mountain and East Fork, but outdoor education, horseback riding and hiking are.

19. Page 135: Table 3-20, Hunter Days. This table is incomplete in that it does not explain how this data is derived. The footnote is also in error. Hunter days are calculated by multiplying the average number of days per hunter by the total number of hunters.

20. Page 137: Another important aspect of the Dubois Badlands is mule deer habitat.

21. Page 137: Correction. The text stated that 500 head of elk are present on Red Canyon during winter, when the correct figure should be 600 head.

22. Page 142: The last paragraph for ORV Designations cites Map 3-32, but this map is well back in the plan on page 179. We suggest it be placed immediately following the first reference. Similarly, the paragraph on access refers to Map 3-33, which is back on page 180. The text states that this map shows BLM and county roads, but it fails to show at least the following county roads:

Natrona No. 321	Dry Creek Road
Natrona No. 322	Turkey Track Road
Sweetwater No. 22	Bairoil Road
Sweetwater No. 23	Wamsutter-Crooks Gap Road

The map shows some state highways, but omits the Sand Draw and Gas Hills Roads, which are now State Highways 135 and 136. The map also fails to show the rest of the Bison Basin Road (BLM 3221) from Bison Basin to US 287.

23. Page 187: In this section, it cannot be assumed that all habitat types will be restored at a rate of one third in 60 years. It is more likely that some habitat types will be easily reclaimed or improved, but that crucial habitats will suffer from a much slower reclamation rate. The generalized assumption in the text appears to us to be misleading.

24. Page 188: In the section on Seasonal Restrictions, while it is true the oil and gas industry is inconvenienced by seasonal stipulations, we feel many of the problems they experience could be avoided by better planning on the companies' part. It has been our observation that too often, the company waits until their lease is about to expire before expressing any interest in drilling, which compresses the drilling schedule. It appears to us that careful planning, and possible site development in earlier years, could reduce overall drilling time constraints.

25. Page 190: Despite the citation of Thomas 1983, the estimate that habitat avoidance zones could be 50 to 100 percent greater than actual habitat losses is too conservative. Using a reasonable avoidance range of 400 yards for elk, the actual area of avoidance around a 10 acre disturbance would be over 150 acres, about 15 times actual habitat loss.

26. Page 194: The section on oil and gas industry impacts on wildlife does not address illegal losses to poaching. While companies may have rules against such activity, poaching still occurs and will increase as the number of people increases. Poaching of animals such as raptors, bighorn sheep, or moose can have significant impacts on populations.

27. Page 202: The section on geophysical exploration correctly states that seismograph crews move rapidly, limiting disturbances to recreationists in most areas to only a day or two. Unfortunately, these few days have often coincided with opening dates or weekends during deer and elk hunting seasons on Green Mountain. Since most of the recreational hunting occurs on those few days, this exploration activity has had significant adverse impacts on hunting quality. Since these hunters are often afoot in dense terrain, there is potential for injury by seismic blasts, and risk to the seismograph workers. One of the plan alternatives should consider additional stipulations on exploration to avoid peak recreational periods.

28. Page 204: Table 4-3, Impacts to Recreation. The section on Impacts to Hunting incorrectly states that the impacts of Alternative D (Preferred) would be the same as that of Alternative A. If the preferred alternative fails to apply protective stipulations to oil and gas developments as the EIS says, impacts will be the same as Alternative C (generally negative), not A.

29. Page 226: Since it is specific with other herd units, we suggest the plan state in the last paragraph on this page that the Green Mountain elk and Sweetwater mule deer herd units would be significantly impacted, not just that elk and mule deer would be impacted.

30. Page 228: The plan is in error when it states that only sage grouse and raptors would be significantly impacted if the Lost Creek uranium deposits were developed. These deposits lie in heavily used winter range

for the Red Desert antelope herd unit. This range is not delineated as crucial because the animals are forced out of the area in severe winters. During normal winters this range is of greater value to the herd than much of the delineated crucial winter range. Any developments in this area could also adversely impact seasonal migrations.

31. Page 230: The concluding paragraph for the locatable minerals section fails to mention that mule deer in the Green Mountain Management Unit could also suffer long-term impacts from development.

32. Page 293: Fish and Wildlife Section of the Preferred Alternative fails to mention the possible reintroduction of bighorn sheep into the Sweetwater Rocks as listed in Table 2-2 on page 34.

33. Page 302: Map 5-8, Access. All comments on access map 3-33 on page 180 (referenced on page 142) apply here.

34. Page 308: Forest Management - second paragraph. The plan should be specific about what "efforts" would be applied to restrict public woodcutting to the desired compartments. It should also indicate what enforcement would be available to ensure other segments of the mountain were not significantly disturbed by "renegade" woodcutters.

35. Page 310: The statement that tract 134 (in the Landownership Adjustments section) does not have legal access is incorrect. This tract is bisected by the Green Mountain Loop Road (BLM 2411). If this tract is removed from public ownership, we recommend it be done only through trade for a similar tract with similar access.

36. Page 317: In the section on Landownership Adjustments, tracts 70 and 125 are both "to be retained" and "considered for sale or exchange." We assume this is a typographical error, as the map shows both are planned for retention in public ownership.

37. Page 323: On Map 5-17, land tracts 44, 59, 63, and 64 have potential for sale or exchange. The rationale for loss of these tracts (page 322) is that they have no significant public resource value and that there is no legal access to the lands. Although there is no legal access to these tracts, all four have significant public resource value. Tracts 44, 63, and 64 lie within crucial mule deer winter range and tracts 44 and 59 lie within crucial elk winter range. We would recommend that these tracts not be sold or exchanged unless adequate replacement values can be assured.

38. Page 337: Landownership Adjustments. Our maps show tracts 158 and 159 are accessed by the Turkey Track Road (Natrona County Road 322). Tract 167 should not be listed here, as it lies in the Beaver Creek Management Unit.

39. Page 341: The section on access roads fails to mention the Beef Gap, Wolf Gap, and Beaver Rim Roads mentioned in the preferred alternative in Table 5-2, page 301.

40. Page 344: We would be quite concerned with any proposal to remove tracts 24, 25, 26, and 27 from public ownership. We feel that lands within this elk winter range must be used in a manner consistent with the management objectives of the unit.

41. Page 350: Throughout the plan, the State of Wyoming is used synonymously with the Wyoming Game and Fish Department. These two terms differ greatly in their definitions. The Wyoming Game and Fish Department is charged with the management of all wildlife within the State of Wyoming. The State Land Board's major objective is to maximize revenues on State of Wyoming owned lands. Both the Wyoming Game and Fish Department and the State of Wyoming own lands, but there is a difference in their management purposes.

42. Page 357: Land Ownership Adjustments and Utility Systems: Should the first sentence be 13 tracts or 14 tracts? The following paragraph refers to 14 tracts.

43. Page 375: The section on Harvest Restrictions belongs under heading III., Forest Management, on pages 376-377, not under I. Oil and Gas.

44. Page 390: Under Alternative C, the short reference "same as Alternative A" should probably be "Same as Alternative B," since A has no timber harvest.

45. Page 408: Item 1) under seasonal restrictions, the preferred alternative should probably state "big game crucial winter ranges" rather than mule deer and antelope crucial winter ranges, in the event some elk, moose, or bighorn sheep crucial winter ranges are defined in the future.

46. Page 409: As stated for page 33, the Existing Management alternative (A) should include the Sweetwater Rocks bighorn sheep reintroduction.

47. Page 431: The Wildlife Stipulations listed here fail to include protection of elk calving areas from May 1 to June 30 as specified in BLM Instruction Memorandum No. WY-85-259 dated March 26, 1985. "Owls" should follow "burrowing" in the latter part of this section on page 432.

48. Map 4-1: Wildlife Habitat/Landownership Adjustments. Shows portions of Sections 17 and 18 in T42N, R105W, as land available for exchange or sale, yet Map 5-37 shows these to be retained. We recommend these lands be retained.

49. Map 5-37: The two parcels of land between Jakey's Fork and Torrey Creek identified as Tract 23 on Map 5-37, page 359, are listed for potential sale or exchange. These parcels of land are contiguous with the Dubois Fish Hatchery lands and provide access to the state land above the hatchery. We would be interested in evaluating Department control of this land, should it become available.

Grazing Supplement Draft RMP/EIS:

We agree with the BLM decision to neither analyze nor consider Alternatives D and E. Both are unrealistic and undesirable. Alternatives C - Enhance Watershed and Wildlife Habitat, is too simplistic an approach to solving range problems to be taken seriously. A combination of reduced livestock grazing and some of the range improvements in the Proposed Action (Alternative A) would have been an alternative worth evaluating. An alternative like the proposed action, with stocking rates based on forage allocation data, should also have been considered.

It is difficult to choose between Alternative B - Existing Management and the proposed action. Without the proposed improvements in range and grazing systems, we feel portions of the resource area will continue to decline in condition. In most cases, this will not be favorable to wildlife.

Not enough detail is given in this DEIS to evaluate site-specific impacts of the proposed range improvements. If planners are able to estimate that 18 miles of new range fence will be needed in allotment 159, we feel they should also be able to provide maps showing proposed fence locations. Data in Table A-8 indicate that BLM range plans are well-developed enough to provide site specific plans for most of the affected allotments. Without this information, we agree with the principles behind the proposed management action, but not with the listed projects. Presumably, each of these will be evaluated later in EAs. Each of the proposed improvements may have positive, negative, or neutral effects on wildlife, depending on site, design, construction, etc.

The proposal to increase livestock allocations in M - category allotments when "appropriate" is disturbing. We question how the BLM will determine if increases are appropriate. Nearly all range monitoring efforts are to be directed to I - category allotments, and we are concerned that necessary data may not be available for the M - category allotments. Just as downward adjustments in livestock use will require documentation and supporting data, so should any upward adjustments.

If the Proposed Action is adopted, we suggest it be modified to accommodate present and future stewardship programs. The Sun stewardship program is currently proposing a 700 acre replacement of sagebrush grassland, in crucial antelope winter range, with created wheatgrass plantings. That planting lies in this EIS area, but is not mentioned in this document. The proposed project is in the Devil's Gate Allotment (No. 0205), which is a M - category allotment. This acreage of brush control should be added to Table A-8 and to the total acreages mentioned in the text on pages 9 and 33.

Dubois Area:

Recently the BLM has incorporated about 2,000 acres of land in the Red Creek and Little Red Creek area into the Whiskey Mountain Bighorn Sheep Management Unit. The Game and Fish, Bureau of Land Management, U. S. Forest Service, and U. S. Fish and Wildlife Service have met and verbally agreed to work up a management plan to enhance bighorn sheep in this area. We suggest Allotment #2124 should be changed from M category to I category, which would allow assessment of possible livestock grazing practices in the area, to the benefit of both wildlife and livestock.

We feel that the Dubois Badlands Wilderness Study Area (WSA) under Allotment #2112 is important enough as wildlife habitat and to its original WSA designation, that it be changed from category C to I, since there is a large percentage of the area in fair and poor range condition.

General Comments:

We support those efforts of a land management agency, such as the BLM, to improve range and habitat conditions on public lands when a large percentage of a specific allotment is classed in fair or poor range condition. Now that a habitat management plan is being formulated, we also support steps being taken to improve those lands that do not meet certain criteria of adequacy in range condition. The Wyoming Game and Fish Department is interested in proper grazing and proper range condition on public lands. Healthy soils and vegetation are major components that comprise the habitat that wildlife depend upon to survive.

Specific Comments on Grazing Supplement Draft RMP & EIS, in Order of Pagination of the Document:

1. Page 1: It appears to us that the description of the Study Area has an error in it. From the southeast corner of the Wind River Indian Reservation it is impossible to follow the Natrona County line. Presumably this means north along the Reservation line to Washakie County.

2. Page 8: Regarding variances from BLM standard fences, we would appreciate the EIS stating that this Department will be consulted prior to issuance of any variances which may impact wildlife values.

3. Pages 11 and 12: The section on actions for M - category allotments implies that all of these allotments would receive increases in livestock use from 10 to 55 percent. Increases of less than 10 percent may be all that is appropriate on some allotments, and others may not deserve increases at all. As with decreases, increases should not be granted unless there is documentation and data supporting the decision.

4. Page 19: The DEIS states "Wildlife also use the grass during the spring season." This is too general and inaccurate. Some species of wildlife use grass yearlong (such as rodents), while other species may not use it at all. We assume what is being stressed here is that this vegetation type is used by big game, predominantly in the spring. However, wildlife and big game are not synonymous.

5. Page 38: In the paragraph on implementation of grazing systems and/or fencing, there is no mention of the serious negative impacts to some species of wildlife (i.e. big game) with increased fencing of the public lands. Even BLM Type I and Type II fences, which represent compromises between the needs of big game and the need to control livestock, can affect wildlife.

6. Page 44: Alternative C: We support this alternative as described in the Grazing Supplement, and recommend that intensive livestock management using a rest rotation system be integrated into this alternative to provide increased protection to stream banks and riparian areas.

7. Page 46: In the Recreation section, small tracts of agricultural land are predicted to be sold for summer homesites in the Enhance Watershed and Wildlife Habitat Alternative. While this may be true, this is just as likely to occur in all the other alternatives as well, and will accelerate or decline with land prices and the financial health of the agricultural industry.

8. Page 79: Table A-8, Proposed Range Improvements, does not include the 700 acre proposed crested wheatgrass planting on BLM lands in Allotment 0205, Devil's Gate (an M - category allotment).

9. Page 86: We question why Albany County is included as part of the Lander Resource Area's economic region. Natrona County data would seem more applicable.

10. Page 89: Same comment as for page 86.

Wilderness Supplement Draft RMP/EIS:

1 The proposed boundaries for the partial wilderness option appear to us to be unmanageable, and we recommend they follow a block pattern using traditional quarter-section lines. The delineated boundaries would create an island of multiple use BLM land in the northern portion of Section 2, T28N, R98W.

Wildlife resources in and around the Sweetwater Rocks WSAs are unlikely to be affected by either a wilderness designation or the lack of such a designation. Wilderness designation in all or any of these areas would provide long-term protection for the enclosed habitats, benefiting mainly mule deer and bighorn sheep, provided a proposed sheep transplant occurs. Raptor nesting sites and small portions of crucial antelope winter range would also be protected. Considering the areas' low potential for oil and gas, only moderate potential for uranium, and fair potential for jade, it is unlikely that any significant amount of habitat would be lost in the near future. Development of these resources could, however, occur in the distant future and wilderness designation would provide protection.

2 Wilderness designation would increase the difficulty in developing habitat improvements, particularly water developments for bighorn sheep. Such developments would still be feasible in wilderness, but there would be greater restrictions on design and construction. Wilderness would pose minor restrictions on vehicular access into some of the pockets in the area, affecting deer and antelope hunters, and any future bighorn sheep hunters. It appears to this agency that wilderness designation is not needed in these areas to preserve wildlife and recreational resources and opportunities, but we also feel such a designation would have little adverse affect on wildlife and recreational resources.

Specific Comments on the Wilderness Supplement Draft RMP/EIS in Order of Pagination of the Document:

1. Page 7: Sweetwater Canyon WSA (WY 030-101): We support the Proposed Action - Partial Wilderness as this alternative offers protection to the canyon area, yet allows motorized access to the canyon rim, which will facilitate fishermen access to the river.

2. Page 9: Fisheries, 2nd paragraph: We are pleased to see the use of motorized equipment, such as an electrical generator for shocking fish, could be allowed for specific projects. We recommend this statement be retained in the Final Resource Management Plan/EIS.

3 3. Page 11: Cultural Resources, 3rd paragraph: We recommend a new heading be inserted before this paragraph. This paragraph is the beginning of the brief summation of the management actions rather than part of the Cultural Resources segment.

4. Page 16: This section on livestock grazing states that Allotments 1622 and 1623 are in the Gas Hills EIS area. It is our understanding these two 1 - category allotments were covered in the Green Mountain Grazing EIS, and therefore this statement may be in error. This section also fails to mention the Diamond Springs allotment (No. 1509) which abuts the WSAs and is an 1 - category allotment discussed in the Gas Hills EIS.

5. Page 43: Information presented on mule deer in the Sweetwater Rocks is out of date. These animals are now managed as part of the Sweetwater herd unit, not the Beaver Rim herd unit. The population objective for the herd (areas 96 and 97) is 5,000 deer post-season, and the population is below that level as a result of losses in the 1983-84 winter.

6. Page 44: The single sentence on pronghorn antelope does not sufficiently describe antelope use of these wilderness study areas. The study areas include pockets of brushland habitat off the rocks, much of which is crucial antelope winter range for the Sweetwater antelope herd.

7. Page 44: We cannot argue with the statement that "No bald eagle nests, roosts, or perches are known to exist within the WSA," but wintering bald eagles have been observed along the Sweetwater River near Devil's Gate, less than five miles from one WSA. This species may use some of the WSAs.

8. Page 57: "Chukar" is misspelled in the section on Small Game and Game Birds.

Resource Management Plan (RMP) Draft EIS

Proposed Actions

The greatest potential danger to wildlife in this RMP is the recommendation that seasonal stipulations (primarily wildlife stipulations) would not be applied to leases in KGSs and areas with high potential for oil and gas unless they are necessary to avoid a significant impact on another resource. The implication is that these seasonal stipulations are often arbitrary and unnecessary. We contend that these stipulations represent a viable compromise to allow oil and gas extraction and exploration without seriously endangering the wildlife resource. Any proposal to abandon the policy of multiple use in these areas to promote a single resource would be of serious concern to this agency.

If this policy is adopted, 32 percent of the crucial winter range for the Green Mountain elk herd (5,000 acres of 15,551 acres) would be unprotected from oil and gas exploration and development. Similarly, 31 percent

of the identified calving habitat for this elk herd (1,160 ac./3,766 ac.) would receive no seasonal protection. Within the entire Lander Resource Area, 12 of 76 identified sage grouse leks, over 13 percent of the identified mule deer crucial winter range (4,722 ac./345,433 ac.), and 20 percent of the antelope crucial winter range (110,000 ac./551,148 ac.) would be denied the limited protection afforded by seasonal stipulations.

Since seasonal stipulations on these leases would be considered case by case, wildlife seasonal stipulations may occasionally be applied. In our experience with the Boulder dome leases on Green Mountain, wildlife stipulations were omitted even when, in our opinion, they should have been applied by regulation. We are concerned that fair consideration for wildlife concerns, even on a case by case basis, may not be adequate.

The proposal to use prescribed burns to improve wildlife habitat is a sound one, since this is a good tool for that purpose. Benefits of the burning projects will depend on the sites to be burned, the prescription, and the objectives for each burn.

We support the decision to continue cooperation on the proposed Sweetwater Rocks bighorn sheep reintroduction. As stated earlier, we feel this proposed action more appropriately should have been included in Alternative A, Existing Management.

The decision to improve management by removing small isolated tracts from public ownership is reasonable. From the standpoint of maintaining public access and protecting wildlife habitats, we believe land trades should be the primary means of removing these tracts from public ownership. Direct sale of such tracts produces reduced management costs, but wildlife management and public access are also important considerations.

We recommend that aquisition of public access be considered in the Whiskey Mountain Management Unit to allow hunters into the Red Creek portion of the sheep winter range. This public access is needed to properly manage wildlife in this section of the county. The area presently has little or no such access. The Red Creek area is an important bighorn sheep winter range. Should improved livestock grazing be instituted in this drainage, wildlife habitat would be greatly benefited. We strongly urge better livestock management practices be explored for this area.

Due to the way they are packaged, it is difficult to recommend one alternative. The Preferred Alternative appears reasonable, except for what we consider to be a disastrous change in wildlife stipulations on oil and gas leases, and a few minor problems with some proposed changes in landownership. Alternative C is not desirable because it favors oil and gas and locatable minerals, and lacks the bighorn sheep reintroduction into the Sweetwater Rocks. Alternative B would be suitable except for what we consider to be the excessive timber harvest proposed on Green Mountain. Alternative A, Existing Management, should also include the proposed bighorn

Mr. Warren White
January 10, 1986
Page 21 - EIS 2547.

sheep reintroduction into the Sweetwater Rocks. If this omission were corrected, we recommend selection of Alternative A over the preferred plan, to avoid the loss of wildlife stipulations on permits for oil and gas exploration and development. We also recommend that the authors correlate the alternatives presented in the three documents to avoid confusion or misunderstanding.

Please forward these comments to the appropriate Federal agencies and contact this office if we may be of further help.

Sincerely,

Bill Mavis

For FRANCIS PETERA
ASSISTANT DIRECTOR
OPERATIONS

FP:HBM:asc
cc: Game Div.
Fish Div.
WATS Div.
Ms. Peggy Petersen-3519 Partridge Lane-Casper, WY 82604

10

DUKE YUN ANC
STATE GEOLOGIST
GARY B. GLASS

SURVEY ADVISORY BOARD
C.L. BLACKSTONE JR.
ROBERT L. BOWEN
WILLIAM R. GRAVES
ROBERT S. HOUSTON
BAYARD D. REA

EX OFFICIO
GOV. ED HERSCHLER
DONALD L. VEAL
DONALD B. BASKO

EDITOR
DAVID COPELAND

Serving Wyoming Since 1933

THE GEOLOGICAL SURVEY OF WYOMING
UNIVERSITY OF WYOMING
BOX 3008, UNIVERSITY STATION
LARAMIE, WYOMING 82071
(307) 742-2054 (307) 721-2920 (307) 766-2286

DEPUTY DIRECTOR
AND STAFF GEOLOGIST
-MINERALS (HARD ROCK)
W. DAN HAUSEL

STAFF GEOLOGISTS
JAMES C. CASE
-ENVIRONMENTAL
RODNEY H. DEBRUIN
-STRATIGRAPHY
RAY E. HARRIS
-MINERALS (SOFT ROCK)
RICHARD W. JONES
-COAL
ALAN J. VER PLOEG
-PETROLEUM

LABORATORY TECHNICIAN
JAY T. ROBERTS

MEMORANDUM

DEC 02 1985

To: State Planning Coordinator
From: Gary B. Glass, State Geologist; and Staff Geologists, W.D. Hausel, Ray Harris, Dick Jones, Rod DeBruin, Alan VerPloeg, Jim Case
Subject: Draft Lander Resource Management Plan and Wilderness Supplement
Date: November 26, 1985

We have reviewed the Draft Lander Resource Management Plan (RMP) and Wilderness Supplement and submit the following comments:

RESOURCE MANAGEMENT PLAN (DRAFT)

Page 18, 2nd paragraph - The Lander Resource Area is in a designated coal production region. The Energy Information Administration (EIA) designates all mines in the State of Wyoming as being in coal-producing District 19 [see EIA's "1983 Coal Production" Report, DOE/EIA-0118(83), published October, 1984]. Perhaps the Draft RMP is referring to the fact that the Lander Resource Area is not in a known Recoverable Coal Resource Area (KRCRA).

Although no interest was expressed in leasing Federal coal during the last call for leasing interest, it does not necessarily follow that this will always be the case.

Chapter III, Affected Environment, p.57-75 - It seems obvious that very little effort went into this write-up. The geologic discussion is vague and rather poorly written. More specifically, we have tried to summarize some of the errors, omissions, etc., on a page by page basis.

Page 57 - Absaroka Mountains is misspelled. Geologic "formations" are incorrectly referred to as geologic "Foundations". The geologic setting of Copper Mountain, the Granite Mountains, and South Pass are omitted, yet these areas are extremely important to the overall mineral potential of the Resource Area. Similar "greenstone belts" in Africa, Canada, Australia, and South America are enriched in mineral resources.

. . . . .

Responses to Letter 10

1. We agree with your reasoning, and the information on the Hemlo discovery is appreciated. The sentence, "Since this gold was not recovered when it was worth over $700 per ounce, it probably will not be mined at its present value of about $300 per ounce." has been taken out.
2. We agree with your statement; the appropriate section has been revised accordingly.
3. We agree, and the sentence has been changed to, "Commercially valuable mineral deposits are not known to occur in the WSA."
4. Although USDI, GS (1970) (formerly Love, 1970) was not referenced as often as Tetra Tech (1983) throughout the "Geology and Mineralization" sections of the draft wilderness supplement, this in no way implies we relied on one more than the other.
5. We agree, and the favorability for jade occurrence has been changed from "low to moderate" to "moderate to high."
6. This has been noted in the mineralization section for each of the Sweetwater Rocks WSAs.
7. The final EIS has been revised to reflect this.

State Planning Coordinator November 26, 1985
Page 2

Page 60, 4th paragraph, second column - The third sentence is repeated word for word in the 5th paragraph.

Page 60 - We commented on the "oil and gas potential rating system" in January of 1985. Because we feel these earlier comments are still appropriate, we have attached a copy of these previous comments.

Page 62, Coal section - There has been some interest in coal deposits at Alkali Butte and Muddy Creek. In addition, the Bureau of Land Management has done some coal exploration drilling in the Alkali Butte area in recent years.

Although much of the Wind River Basin has little potential for coal mining, there are some areas that are attractive for smaller mines to serve local industrial, commercial, or domestic markets. On the longer-term, in situ gasification of deeper coal beds, especially those near old oil fields, could be developed for use in enhanced oil recovery methods.

This section should refer to Map 3-3 on page 66, but it doesn't.

Page 62, Phosphate section - "Covant Creek" should be "Conant Creek".

Page 66, Map 3-3 - This map is extremely generalized, and the distinction between phosphate areas and geothermal areas is not readily made.

What are the bases for classifying and delineating the areas of coal and phosphate resources as shown on this map? Are they based on geologic formation, depth, thickness, quality, etc.? For example, nearly the entire Wind River Basin is underlain by coal resources.

Page 67, Table 3-3 - The projections in this table may be too optimistic since they are arrived at by averaging a growth rate using the trends of 1950-1984. Falling prices and current economic trends have already caused exploration to drop off, especially in the case of natural gas.

Page 67, section on Phosphate - Phosphorous "peritoxide" should be phosphorous "pentoxide". The reference to "Coffuran (1967)" should be "Coffman and Service (1967)".

Page 68, section on Phosphate, left column - This section refers to increasing severance taxes although we know of no actions in this regard.

Page 68, Uranium section - There is currently only one uranium mill operating in the Resource Area. "Tepee Trail" should be "Tepee Trails" Formation. The report does no mention the uranium occurrences at the Flathead/Precambrian unconformity. The Wasatch and Green River Formations are separate formations.

State Planning Coordinator November 26, 1985
Page 3

Page 68, Gold section - This section left out discussions on gold resources along the Wind River, Little Wind River, and Popo Agie River. Gold was mined from placer deposits along the Wind River near Riverton at the turn of the century. This section should also include a description of the Clarks Fork placer near Dubois.

Although located just outside of the Lander Resource Area, the auriferous boulder conglomerate at Oregon Buttes should be included in the discussion of South Pass. According to Love and others (1978), the gold in the arkosic grit of this conglomerate was eroded from the granite-greenstone terrain to the north. The Wasatch conglomerate is reported to have a significant gold resource by Love and others.

In the second paragraph, it is stated that all of the mines at South Pass were operated by inexperienced miners, prospectors, and by crooks. This may have been the case for some of the mining ventures, but others like the Tabor Grand were operated by experienced miners who previously worked in the Georgetown District of Colorado. South Pass had its share of inexperienced miners and crooks, but probably no more than any other historic district in the western U.S.

In this same paragraph, gold production estimates should be included.

The third paragraph should include a discussion of the Tin Cup and Bridger (Copper Mountain) Districts. In particular, the variety of mineral resources, mineral potential, and historic production at Copper Mountain has been ignored. The DePass Mine in the Copper Mountain District. is one of the more extensive metal mines in Wyoming, but it isn't mentioned. Copper, gold, and silver were produced at DePass.

Gold mineralization in South Pass could be discussed in greater detail in the fourth paragraph. The gold at South Pass occurs in all major mappable units, but is in particular, concentrated in shear zones in metagreywacke of the Miners Delight Formation. Gold is found less often in "true" quartz veins, and may potentially occur in stratiform deposits. Gold also occurs in Recent placers. Also, "Baily (1973)" should be "Bayley and others (1973)".

This section should include a discussion on exploration by major mining companies for gold during the past 5 to 10 years. From reading this document, the reader gets the distinct impression that the metal resources are very small, and only a few "inexperienced" prospectors have a potential interest for metals in the Lander Resource Area, which is not the case.

8. Precambrian rocks have been added to the "Geology" section of chapter 3 for Copper Mountain, Corrections in capitalization and spelling have been made.

9. This information has been incorporated into the final EIS.

10. During the interim management period for WSAs, no restrictions would apply to academic studies of the geology provided such studies would not impair wilderness suitability. Drilling of exploratory holes for academic studies would not be allowed, for example. Drilling would be permissible on claim properties meeting "grandfathered" uses and/or valid existing rights. Pre-FLPMA oil and gas leases could be explored by drilling.

11. The "Geologic Time Scale" in the appendix has been changed.

Page 69, Map 3-4 - This map does not show all the mineral localities referred to in the text.

Page 70, Zeolite section - The Wagon Bed (Eocene) Formation ashes are not from the Yellowstone Volcanics (Quaternary). They are from that region, but the writer apparently did not understand the distinction.

There are more theories, including more recent ones, for the formation of zeolites than the Van Houten (1964) reference. J.D. Love's Professional Paper 495-C on the Granite Mountains contains an example, and this report isn't even referenced in the RMP.

"Van Houten" (1964) is misspelled in the 1st paragraph.

There is also no reference to the existing zeolite production from Arizona, which attests to the fact that zeolites are not in the "infant stage" of development.

In the next to the last paragraph "Hansel" (1978) should be "Hausel" (1978).

Page 70, Other Minerals section - Although the value of gravel, crushed stone, etc. may be small on a piecemeal basis, the cumulative value is significant. There is a flagstone quarry just south of Dubois, which was not mentioned.

Tungsten, which is an important strategic mineral, should be discussed more fully in this section. Significant tungsten anomalies occur at Copper Mountain, Lewiston, and South Pass. Copper-silver-zinc red bed deposits along the flank of the Wind River Range should also be included in this discussion.

Page 70, Physiography section - The term "Shoshone Mountains" is no longer used for the area between the Owl Creek Mountains and the Absarokas. Washakie Range is now used (see Love and Christiansen, 1985 - Geologic Map of Wyoming, sheet 2). Similarly, the Bridger Mountains are generally thought to be simply the eastern portion of the Owl Creek Mountains. The Green Mountains and Sweetwater Arch are generally considered to be part of the Granite Mountains uplift. A more modern description of the physiography is given in Thornbury, W.D., 1965, Regional Geomorphology of the United States: John Wiley & Sons, Inc., NY, Chapter 19.

The term "Wyoming Basin" generally refers to all the basins and uplifts between the Southern and Middle Rocky Mountains, not just the features described in this RMP.

Thornbury spells "Shoshoni" Basin, "Shoshone" Basin, and describes it as the eastern part of the Wind River Basin. Also, there is no mention of the structurally important Casper Arch on the east margin of the Shoshone Basin. On line 7 of the last paragraph [right column], "Mountains" should be capitalized after Wind River.

Page 71, Map 3-5 - Minimally, "Wyoming Basin" should be deleted from this map.

Page 70 and following pages - This section or the previous section of the RMP should include some mention of geological hazards. There are numerous known or suspected active faults in the southern and southeastern part of the Resource Area. There has also been historic seismic activity in the area. Refer to U.S. Geological Survey Open-file Report 75-279 - Known and Suspected Active Faults in Wyoming, Geological Survey of Wyoming Open File Report 84-13 - Preliminary map of Earthquake Epicenters in Wyoming; and, U.S. Geological Survey Open-file Report 82-1033 on maximum horizontal accelerations expected in the area.

There are numerous landslides and landslide-prone areas, shrinking and swelling clays, compactible soils, and selenium-rich areas that were not mentioned as occurring in the Resource Area. In the latter case, refer to Geological Survey of Wyoming's Open File Report 85-14.

Page 72, 2nd paragraph, left column - It is not clear what is meant by "The area is not typical because the foothills occur in the basin, away from the mountain front". Most "foothills" adjacent to Wyoming mountains are in the adjacent basins.

The description of relief in the rest of the paragraph is confusing--most readers will not understand any of this, especially the last part about most of the valley being carried away.

Page 72, 3rd and 4th paragraphs, left column - The rocks in the Absarokas are better described as "volcanically-derived sedimentary rock" or "volcaniclastic rocks" than "layers of magma". The Shoshone Mountains are not simply made up of the Wiggins Formation. The Washakie Range (Shoshone Mountains of the RMP) is a partially exhumed, granite-cored uplift of Paleozoic and Mesozoic rocks. The Wiggins Formation is part of the volcanic pile that once completely buried the Washakie Range.

Page 72, 5th and 6th paragraphs - "Mountains" should be capitalized in the first line. The Dinwoody and Phosphoria Formations are Paleozoic rocks, not Mesozoic rocks; and, there is a fair amount of Paleozoic as well as Mesozoic rock exposed on the southern end of the Bighorn Mountains.

Page 72, 7th paragraph - The Rattlesnake Hills (Mountains of the RMP) are better described as a Precambrian-cored anticline with uplifted Paleozoic and Mesozoic rocks on its flank. These rocks have been intruded by volcanic rocks, including laccoliths, sills, plugs, volcanic dikes, etc. In fact, only a small portion of the Rattlesnake Hills is composed of volcanic rocks.

Page 72, 8th paragraph - The White River Formation that occurs on the northern foothills of the Green Mountains has never been subdivided in that area. The Crook Mountains, which lie between the Green Mountains to the east and the southeastern Wind River Range to the west, are not mentioned or shown on Map 3-5.

Page 72, 9th paragraph - The current idea on the origin of the Granite Mountains (see Love, J.D., 1970, U.S. Geological Survey Professional Paper 495-C) is that the Precambrian core of the range was buried by deposition of Eocene, Oligocene, Miocene, and younger rocks before the range subsided in probably Pliocene time. The granitic knobs were exposed by regional epeirogenic uplift that affected not just this area, but the entire Rocky Mountain region. The Granite Mountains preserve a depositional remnant of previously more extensive deposits.

Page 157, South Pass Mining Area - The first paragraph mentions that "South Pass yielded well over a million dollars in gold during its history". This does not give any real indication of value - was this 1880 prices, 1978 prices, or present prices? A better statement would be - "At today's prices ($325 per ounce), South Pass may have yielded as much as $106,000,000 in gold".

The discussion of recurrent gold activities in the 2nd paragraph left out the discovery of the Lewiston District in 1879.

Page 158, 4th paragraph - A large amount of the interest in gold at South Pass has been by major mining companies in addition to prospectors.

Page 158, 5th paragraph - This paragraph should include a discussion of the Wyoming Department of Environmental Quality's proposed plans to reclaim some of the abandoned mines in this area. This reclamation will have an effect on the historic sites.

Page 166, Riverton section - The report calls U.S. Highway 26, Wyoming State Highway 26.

Page 168, Oil and Gas section, last sentence - What is meant by the terms "early production potential"?

Overall the report could use a discussion of the types of oil and gas traps found to date, and the types of traps which will be explored

for in the future, i.e., future exploration will be for deep stratigraphic and structural/stratigraphic traps. Also, there is no mention of the major oil and gas-producing formations in the area.

Page 168, Uranium section - The current uranium production from the Resource Area is all contracted to Japanese utilities, not domestic buyers. Additional production will depend on new contracts being signed.

Page 172, Phosphate section - Regional phosphate production will increase more than stated due to the addition of Chevron's fertilizer plant in the Rock Springs area.

Page 172, Bentonite section - This discussion of bentonite is not adequately related to the Resource Area.

Page 174, Zeolite section - Employment and "income" levels for zeolite mining should be available from the Arizona Geological Survey, for comparison.

Page 181 - The RMP should discuss how they plan to handle requests for coal exploration and development, should they occur.

Section on Environmental Consequences, beginning on page 187 - This section seems to have emphasized the negative consequences of mineral exploration and mining and has not pointed out any possibly positive consequences or the temporary nature of mining activities.

Earlier on page 195, the RMP stated that the effects that the mining industry has had on the fish and wildlife populations is "not well documented". If the effects are not well documented, how can the effects be so negative?

Page 236, Locatable Minerals - Adverse Impacts - This section goes into great detail about the adverse impacts of mineral exploration and mining, but does not discuss the adverse impacts that BLM's limitations on mining and exploration activities might have on mineral activities and potential mineral development in this part of the State.

Page 237, Management Actions for Cultural/Natural History - This section should discuss the Wyoming Department of Environmental Quality's plans for abandoned mined land reclamation in the South Pass, Lewiston, Copper Mountain, and Tin Cup Districts.

Page 278, Forestry Impact Number 3 - This statement is not true for the South Pass gold mining area. The principal gold deposits do not occur in timbered area.

Page 280, Locatable Minerals, 1st paragraph - This section could use a discussion on what the "plan of operation" involves or does not involve. For instance, what is required in the "plan"; what type of exploration can be pursued without such a "plan"? (If exploration is not allowed without first having a plan of operations), this could greatly affect the potential for discovering any gold deposits.

Page 282, Map 5-2 - Like most maps in this RMP, this map does not have any township and range grid to help a reviewer or user locate things.

Page 320, Locatable Minerals section - Potential mining in the Lander Slope area is probably limited to limestone aggregate, which has a low possibility for development. There are parts of the area, however, that could be mined without affecting the aesthetics of the Lander Slope area.

Page 321, Phosphate section - This section is referring to "resources" not "reserves" of phosphate.

Page 329, Locatable Minerals section - Requiring "plans of operations" in the South Pass District could have a severe impact on mining and exploration in this area, depending on the requirements.

Page 341 - "No surface occupancy" restrictions for locatable minerals will essentially close this area to non-oil and gas mineral development. Although it is unclear if this restriction only refers to oil and gas, it would seem like the BLM would have to impose the same restrictions on all mineral activity.

Page 357, Locatable Minerals - This section should include a discussion of the Clarks Fork gold placers.

Page 441, Glossary - "Gneiss" is misspelled.

Page 442, Mesozoic - What is the citation for the timespan used for the Mesozoic?

Page 443, Tertiary - What is the citation for the timespan used for the Tertiary?

Page 445, References - Although the University of Wyoming's Institute for Policy Research (IPR) was cited for some material in the text (pages 172-174), their publication is not cited in the "References". Also, the material cited as IPR was prepared for IPR by our agency.

Page 445, Hausel and Holden citation - "uplifts" is misspelled. Also, it should be "Hausel, W.D.", not "Hausel, D.W.".

WILDERNESS SUPPLEMENT (DRAFT)

1 Page 31, 1st paragraph, left column, last sentence - Before a deposit can be mined, it has to be discovered. Only after a gold deposit is discovered and its reserves drilled out, does the gold price come into play. There are several gold mines presently being developed around the world (at $325 an ounce) that were not mined at $700 an ounce, simply because they were not discovered early enough to take advantage of the $700 per ounce price. In fact, the percentage of gold mines operating at $700 per ounce were quite small compared to mines operating at today's prices.

One of the more significant gold discoveries this century was made in an area that had been prospected more than 100 years, yet the first gold wasn't produced until gold fell to $320 an ounce. This is the Hemlo discovery in Ontario that lies adjacent to the Trans-Canada Highway (Engineering and Mining Journal, Sept. 1985).

2 Page 31, 2nd paragraph, left column - Although Tetra Tech's assessment of uranium at the Cambrian-Precambrian contact is low, the anomaly is important and may guide some future exploration.

3 Page 31, left column, last paragraph, last sentence - This last sentence is an unsupported statement.

4 Page 31, 39, etc. - The reliance on MLRE studies (the Tetra Tech reference) for geology and mineralization potential is questionable. More reliance should be given to Love (1970), although portions of the RMP's text suggest that the authors may not have understood it.

5 Page 42, 4th paragraph, right column - Since there was jade mined in the the Sweetwater Rocks area in recent years, we fail to see how there could only be a low to moderate favorability for its occurrence. We would call the occurrence of jade, a certainty.

6 Page 42, paragraph 6 - [illegible] have been found in the Moonstone Formation in this area.

7 Page 42, paragraph 7 - We have shown occurrences of gold, silver, and other minerals in or near this WSA (see Geological Survey of Wyoming Map Series MS-14, 1985).

8 Page 48, Geology and Mineralization - This discussion does not mention the Precambrian rocks exposed in this WSA. There are also much better references to the geology of this area than Tetra Tech (1983), which is a MLRE study.

There are also numerous errors in capitalization in this discussion, and the Tensleep Sandstone is misspelled.

Page 56, Mineralization section - Precambrian rocks in the east of the BLM host a variety of mineral resources, including iron, copper, gold, silver, tungsten, feldspar, tantalum, beryl, rare earth elements, and lithium. Several mines were developed for many of these commodities. In particular, there has been production of feldspar within the past ten years; some gold was mined from the Gold Nugget region; and, gold, silver, and copper were mined at DePass.

9

Page 67, and 73 - If taken literally, these discussions of the BLM's rules for wilderness exploration disallow any "geologic studies" except for observations conducted after filing an approved plan. Does this restriction include academic studies of the geology, or does the BLM just mean drilling, etc.?

10

Pages 118 and 120, Appendix III - Although the title of this Appendix is "Geologic Time and Formations", there are no formations listed. The chart on page 120 is confusing in regard to Era and Period boundaries; the Ordovician Period is missing; the units present in the Wind River Basin are not annotated as such; and, there is no citation to where the listed ages came from. In regard to this latter comment, the age estimates do not agree with those adopted in 1985 by the Geologic Names Committee of the U.S. Geological Survey.

11

11

TOWN OF DUBOIS
COUNTY OF FREMONT
DUBOIS, WYOMING

Jack Kelly, Area Manager
Bureau of Land Management
Lander Resource Area
P.O. Box 589
Lander, Wyoming
82520

Dear Mr. Kelly,

On February 12, 1986 the Dubois Town Council instructed me to comment on the Lander Resource Management Plan D.E.I.S.

We are concerned primarily about three areas that we feel could seriously affect Dubois and its surrounding area.

First, the no surface occupancy for oil and gas leasing in two areas, Whiskey Mountain sheep winter range and the East Fork elk winter range seem to the town fathers and our constituent population not altogether adequate. Please do not construe this to mean Dubois is against Oil and Gas Leasing, quite the contrary. We support Multiple Use to its fullest extent. We feel these two areas would be better managed for their wildlife potential. Benefits for our community seem to be wildlife rather than oil and gas. These areas are small but can contribute much to preservation of our Sheep and Elk herds and the economic benefits we receive from those resources.

Secondly, we feel Wyoming has enough wilderness areas. Until the wilderness areas we have are being adequately managed and used we can not support that type of designation.

Thirdly, we think the B.L.M. should address the Wolf Recovery Plan in Wyoming. We feel the B.L.M. should take an active role in preventing anything like that from happening. Wolves could be detrimental to our Big Horn Sheep and Elk calving areas. Critical habitat is hard enough to manage without creating additional threats to a wildlife population.

One last note, the Warm Springs Tie Hack Flume is a significant part of the Dubois heritage. Natural history is part of Dubois and its surrounding area. Dubois would like to see the B.L.M. pursue historic designation and interpretive promotion of some aspect of our Tie Hack history.

Thank you for the opportunity to respond to your D.E.I.S. The B.L.M. deserves a vote of confidence for a job well done.

Sincerely,

Danny F. Grubb
Mayor, Town of Dubois
Dubois, Wyoming

Response to Letter 11

Thank you for your comments.

12

City of Riverton Box 1700 RIVERTON, WYOMING 82501

Administration
Finance
Engineering & Inspection
856-2227

Maintenance
Water & Sewer
856-4230

Police Dept.
856-4891

February 12, 1986

Mr. Jack Kelly, Manager
Lander Resource Area
Bureau of Land Management
Lander, Wy. 82520

Re: Lander Resource Area
Resource Management Plan

Dear Mr. Kelly:

Our local government has reviewed the above documents and feel it is critically important to the economic future of our county for us to respond. The full utilization of all available resources is the only foreseeable devise available to provide long term stability to our extractive and support industries and our agricultural markets. Although we are aware of the tourism potential, we feel trading active mining, oil and gas production, and similar extractive industries for motels, restaurants, curio shops and the attendant low paying employment is not in the interest of this community, the county and our state.

We deeply believe in the multiple use concept. The effort to "protect" further lands and "enhance long term opportunities for primitive, unconfined recreation ...." is not a cumulatively positive result. It simply assures the predominance of our population will be unable to access, enjoy or benefit from employment on these lands.

We urge the permanent designation of Sweetwater Canyon, Sweetwater Rocks and Copper Mountain as MULTIPLE USE areas available for recreation, mineral extraction, grazing and the economically beneficial activities to which the lands may be best utilized. We further recommend a re-evaluation of the entire disturbing trend towards over valuing the concept of wilderness.

Sincerely,

James D. Soumas
Mayor

JDS/vl

Response to Letter 12

Thank you for your comments.

13

Lander Area
Chamber of Commerce

160 North First Street Lander, Wyoming 82520 307-332-3892

14 February 1986

Jack Kelly, Manager
Lander Resource Area
Bureau of Land Management
Lander, Wyoming 82520

Dear Jack:

The Lander Chamber of Commerce would like to go on record as being against the proposed wilderness or limited use areas within the state of Wyoming. We refer to the following areas that are now being considered.

1. Sweetwater Canyon
2. Sweetwater Rocks Area
3. Copper Mountain
4. Whiskey Mountain
5. The Dubois Badlands

In efforts to promote tourism, snowmobile trails, hunting and other outdoor recreation to boost the local economy, we feel that these are important areas that could squelch our attempts in the promotions we are involved in.

Please feel free to contact me if you have any questions.

Kind Regards,

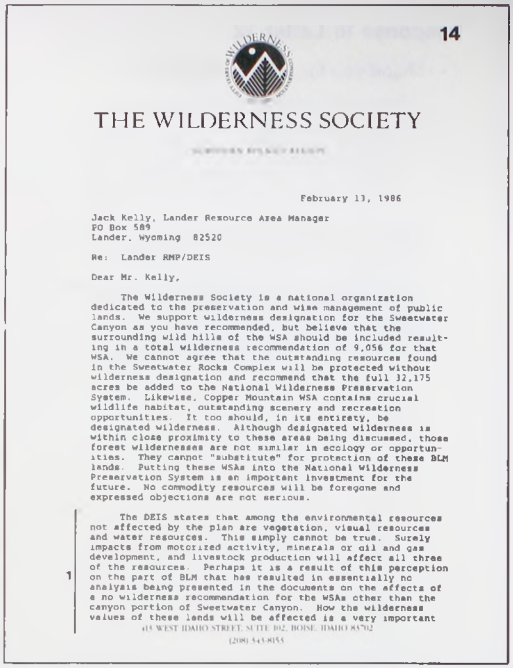
LANDER CHAMBER OF COMMERCE

Linda Van Fleet
Manager

Home of: Pioneer Days Apple Festival Wyoming State Winter Fair One Shot Antelope Hunt

Response to Letter 13

Thank you for your comments.



14

THE WILDERNESS SOCIETY

February 13, 1986

Jack Kelly, Lander Resource Area Manager
PO Box 589
Lander, Wyoming 82520

Re: Lander RMP/DEIS

Dear Mr. Kelly,

The Wilderness Society is a national organization dedicated to the preservation and wise management of public lands. We support wilderness designation for the Sweetwater Canyon as you have recommended, but believe that the surrounding wild hills of the WSA should be included resulting in a total wilderness recommendation of 9,056 for that WSA. We cannot agree that the outstanding resources found in the Sweetwater Rocks Complex will be protected without wilderness designation and recommend that the full 32,175 acres be added to the National Wilderness Preservation System. Likewise, Copper Mountain WSA contains crucial wildlife habitat, outstanding scenery and recreation opportunities. It too should, in its entirety, be designated wilderness. Although designated wilderness is within close proximity to these areas being discussed, those forest wildernesses are not similar in ecology or opportunities. They cannot "substitute" for protection of these BLM lands. Putting these WSAs into the National Wilderness Preservation System is an important investment for the future. No commodity resources will be foregone and expressed objections are not serious.

1 The DEIS states that among the environmental resources not affected by the plan are vegetation, visual resources and water resources. This simply cannot be true. Surely impacts from motorized activity, minerals or oil and gas development, and livestock production will affect all three of the resources. Perhaps it is a result of this perception on the part of BLM that has resulted in essentially no analysis being presented in the documents on the affects of e no wilderness recommendation for the WSAs other than the canyon portion of Sweetwater Canyon. How the wilderness values of these lands will be affected is a very important

615 WEST IDAHO STREET, SUITE 102, BOISE, IDAHO 83702
(208) 343-8155

part of the data base that must be reviewed in order to make an informed decision about these resources. This proposed plan cannot be considered complete until these issues are addressed for all of the areas and for all possible activities under multiple use management.

The wilderness recommendation is sorely small compared to the resources that deserved protection. As pointed out in the DEIS, the socioeconomic base of the area depends upon tourism as much as any other aspect of the local economy. It also appears to contribute more directly to jobs and income (refer to Table 2-6)than any other industry. Those very resources that would be jeopardized by inadequate management are the lifeblood of Fremont County. The DEIS states in numerous places that the livestock industry would remain essentially the same and that the likelihood for minerals production is low. Oil & gas production potential is low in all areas except one where the geologic formations indicate a moderate possibility of commercial production. Such insubstantial adverse impacts positively support the desirability of wilderness designation.

Sweetwater Canyon WSA

Clearly the canyon itself supports many outstanding resources including a regionally important trout fishery, habitat for moose, elk, deer, pronghorn antelope, many furbearers, raptors, and numerous small game and game birds. The canyon riparian zone provides critical winter habitat for moose from the Wind River Range, severe winter habitat for elk, and yearlong habitat for mule deer. The fishery in the river is generally described as good in terms of population however no clear statement is made regarding potential and optimum condition or the present measure of sedimentation, against which impacts of future activities could be measured. The EIS does state that streambanks are "mostly" stable and that "spawning gravels have variously been described as good to poor." It also states that "one trout problem within the study area is localized damage to streams by livestock." It points out that there is a range of severity with this problem. Stream widening and sloughing have occurred as well. Furthermore, two of the tributaries, Willow and Norman Creeks, receive significant damage from livestock including vegetation destruction, bank damage and siltation all of which result in fishery degradation. The Wyoming Game and Fish Department has identified the Sweetwater River in the canyon as an important regional fishery that should be protected and enhanced. The current management approach clearly is inadequate and the fishery and wildlife habitat resources are in jeopardy. Although this plan recommends wilderness protection for the canyon itself, it does not recommend protecting portions of the WSA through 2 which Willow and Norman Creeks run. These tributaries need

Responses to Letter 14

1. Visual resources are an integral part of the wilderness value of naturalness. If naturalness is unaffected, then the visual resource would be unaffected. Thus, in designated wilderness, there would be no noticeable human-caused intrusions into the natural landscape. Given the low likelihood of intrusions into the WSAs, the differences between visual resources in designated areas or in nondesignated areas would be negligible.

   Concerning water quality, the only management action likely to occur that has the potential to affect water quality negatively is the development of the placer mining claims in Sweetwater Canyon WSA. However, the potential for development to occur on these claims is low.

   The primary cause of impacts on vegetation is livestock grazing, and as noted in the EIS, livestock grazing will not change in any of the WSAs, regardless of the alternative selected.

2. The Proposed Action now encompasses the portions of those streams within the WSA.

3. We currently have no ecological range condition inventory for the Sweetwater Canyon WSA. Vegetative conditions were not a factor in determining the WSA designation. The canyon is contained within two category "I" allotments.

4. As noted in this document, the potential for the occurrence of surface-disturbing activities occurring is low. Please note that the Oregon/Mormon Pioneer National Historic Trails are not within any of the WSAs. See Chapter 1, for more information.

5. The Final EIS has been revised to better reflect the impacts that designation of the Sweetwater Rocks WSAs as wilderness would have on adjacent landowners. Please see appropriate sections of Chapters 1, 2, and 4. Trespass onto private lands was a major consideration because the WSAs are nearly surrounded by private land, and the best access to the WSAs is across private land. We now estimate that nonmotorized forms of recreation would increase by an estimated 5% after wilderness designation in the Sweetwater Rocks WSAs. Although the increase would be slight, it would in our opinion, cause a significant increase in trespass problems for the adjacent landowners and increase intrusions into their lifestyles.

to be protected for the longterm health of the regional economy, biological diversity the fishery and the habitats and water resources supported by the riparian resource. With wilderness protection greater assurance exists that damage, especially from escalating livestock grazing and surface disturbing activities will not occur.

3 In the plan no description was given of the ecological and range conditions and trends of the Sweetwater Canyon WSA beyond the classification that there were one or more severe problems in the canyon. What is the condition of the riparian zones within the canyon and tributaries? This information is important for the public to review in order to determine what kind of management and protection is necessary. The ecological condition of the hills surrounding the canyon is important in its own right but is also important for the fundamental contributions they make to the canyon. The vegetation contrast between the canyon and the surrounding rolling hills is dramatic. None of the three ecosystems in the WSA are represented in the National Wilderness Preservation System. Conflicts that do exist are minimal in that they involve elimination of motorized vehicles yet this represents a small problem since most of the WSAs are roadless and current activity is insignificant. Without wilderness protection for the 3,300 acres beyond the canyon, possible introduction of surface disturbing

4 activities would change erosion rates and could cause adverse effects on the Oregon/Mormon Pioneer Trail. As pointed out in the DEIS, the importance of this portion of the Trail is derived in great part from the pristine character of it and the surrounding area. We certainly support BLM's recommendation for wilderness protection for the canyon and point out that this recommendation is also supported oy the National Park Service which studied the Sweetwater River for inclusion in the Wild and Scenic River System. We believe, however, that because of outstanding values and no significant conflicts or adverse impacts on the local socioeconomic factors that the entire WSA should be designated wilderness.

Sweetwater Rocks WSAs

The four WSAs within this management unit have significant recreation and historic value. The large expanses of exposed granite, not found elsewhere in central Wyoming, form an impressive scenic panorama for this historic area. Rock climbing opportunities are considered world class, especially on Larkin Dome, Split Rock, Moonstone and the Great Stone Face. Additionally, recreational use and interest in the historic trails has been increasing. None of the ecosystems found in the WSAs is presently represented in the National Wilderness Preservation System. No significant resource conflicts exist within the WSAs

- 3 -

although there are problems associated with access to the WSAs over private lands owned by area ranchers.

The conflicts that do occur stem from cattle grazing operators who fear curtailments in their operations and the concern of private landowners who are concerned about trespass. The cattle operations themselves would remain basically intact with no reductions in AUMs and since most cattle herding and fence repair in now done by horseback, the nonmotorized restriction will not adversely impact operations either. Infact, only a small portion of the grazing allotments in the area are within the boundaries of

5 the WSAs both in terms of acreage and forage. In regard to objections made by local landowners it is important to point out that their concerns stem from a fear of increased usage yet BLM estimates that usage will only increase by 10% and that this increase would occur with or without wilderness designation. It does appear though that the agency should developing solutions to any problems public land users cause to the private sector, but foregoing wilderness protection for these lands is too extreme a solution and will not, infact, solve the problems of access at all.

Two of the WSAs are historic and present bighorn habitat although no population exists now. A sheep population was known to exist as recently as 1982 however none were sighted in 1983. Additionally, these WSAs have high potential and probability for bald eagle, peregrine falcon

6 and the black-footed. BLM has an affirmation duty to protect these habitats for these threatened and endangered species and indeed enhance their population development. Wilderness designation would complement these goals and guarantee habitat protection whereas a return to multiple use management would reestablish an uncertain situation.

The DEIS addresses the private sector's capitalized values of AUMs in numerous places with varying degrees of disclaimers. This repeated consideration gives this situation a status that it should not have in this public document. We believe that since the BLM is specifically and legally prevented from officially recognizing these privatized values attributed to public assets, they should not be part of the resources scenario that is considered in the wilderness designation question. The government has taken the position not to engage in this aspect of grazing on public lands thus it should not be considered in the analysis and planning process.

We support wilderness designation for these four WSAs. It would be unjustifiable not to protect the important Sweetwater Rocks' landmarks and historical sites. The cultural and wildlife resources, especially those habitats for bighorn, peregrine falcon and black-footed ferret, could be displaced by surface disturbing activities, and the diversity found in these WSAs would not be added to the

- 4 -

6. Bald eagles are reported to frequent the Sweetwater Rocks. Prairie dog colonies occur, making black-footed ferret occurrence a possibility, and peregrine falcon habitat appears good, but none have been observed. The Sweetwater Canyon is in the range of these three species, but observations of them have not been documented. We would not consider the potential for these species as "high" in these areas, with the possible exception of wintering bald eagles. We agree that designation would complement habitat protection, but it could inhibit habitat enhancement by preventing projects for improvement of vegetation or water.

7. The Sweetwater Rocks WSA complex is noted in the Lander RMP/EIS as an "avoidance area" for utility corridors. The likelihood of such development is extremely low; therefore, the discussion was deleted from the final EIS.

NWPS. As mentioned earlier, the recreational opportunities have international significance. The wilderness areas nearby do not represent a similar type of environment and cannot be considered as equivalent opportunities or resources. Grazing would continue virtually as it is now, and since the potential for oil & gas, and minerals development is low thus unlikely, conflicts in general are insignificant. It appears that the only opposition to wilderness designation comes from six local landowners.

The possible construction of powerlines was mentioned in the "Environmental Consequences, Sweetwater Rocks" portion of the DEIS yet such corridors and the impacts they cause were not addressed elsewhere in the DEIS. Certainly utility corridors are major activities and cause major adverse impacts to the environment. Full data collection, analysis and public review of any utility corridor activity under consideration must be incorporated into this stage of the review process. 7

In conclusion, The Wilderness Society supports wilderness designation of the Sweetwater Canyon WSA (WY-030-101) 9,056 acres; Lankin Dome WSA (WY-030-129) 5,956 acres; Split Rock WSA (WY-030-122) 12,749 acres; Savage Peak WSA (WY-030-123a) 7,041 acres; Miller Springs WSA (WY-030-123b) 6,429 acres; and Copper Mountain WSA (WY 030-111) 6,658 acres for a total of 48,089 acres. This total represents less than 2% of the land managed by the Lander Resource Area. We take this position because of the natural resource values found in these WSAs including but not limited to important wildlife habitat, world class recreational opportunities, important historical trails and cultural resources, and the unique contributions they would make the National Wilderness Preservation System. No significant conflicts exist that would be adversely affected by this designation.

Thank you for this opportunity to comment.

Sincerely,

Jane Leeson

15

Wind River
Multiple Use Advocates
P.O. Box 1126, Riverton, Wyoming 82501

February 10, 1986

Mr. Jack Kelly
Lander Resource Area Manager
P.O. Box 589
Lander, Wyoming
82520

Dear Sir:

We, the 100+ members of the W.R.M.U.A. wish to comment upon your Lander Wilderness Supplement, Draft Resource Management Plan /EIS, and upon the associated Resources Management plan. Thank you for the chance to respond to your plan.

The Copper Mountain (WY 031-111) plan

We agree with the No Action proposal and the continued present management plan, if that plan means multiple use for the area.

There is moderate interest in the mineralized area included in the northern bounty of this study area. This interest may well increase with changing economics, changing costs, and better equipment. This probable increase in technology will make the oil and gas potential, present in the southern part of the Copper Mountain area a useful economic commodity.

All grazing rights and their related riparian rights with access to water for livestock should be continued.

Since no documented sightings of endangered species have been made in the Copper Mountain area, we suggest that it is highly probable that these species do not consider its use for more than casual users.

In summary, there seems to be no need for the Wilderness designation for this area, in the foreseeable future. You stated goal under the Wilderness supplement indicates "the area would not be managed specifically for wilderness values." We support this conclusion and request that your withold the area from any further Wilderness classification. (see page 20.)

Responses to Letter 15

1. The mining claims on lands open to mineral location within the Sweetwater Canyon WSA after October 21, 1976, are valid to the extent that they were located properly and recorded as required by law. Whether each claim has a discovery of a valuable mineral or not could only be determined under a stringent validity examination and other legal proceedings. The BLM's *Wilderness Management Policy* (1981) describes how unpatented mining claims and operations are to be managed in WSAs. The BLM has always had the authority to conduct validity examinations on mining claims. The wilderness management guidelines better explain when examinations can be conducted.

2. The BLM does not regulate water rights. Wilderness designation would not result in any change in grazing in this WSA. Upward or downward adjustments in numbers of livestock would be determined by monitoring of vegetation conditions and would be based on sound range management principles. Fencing would be used only if other management methods were not achieving the desired results.

Sweetwater Canyon

This area is prime mining country, particularly for placer mining downstream from the Atlantic City and South Pass city areas. Some gold tungsten areas (scheelite) may be present. Oil and Gas leasing has a considerable interest in the continental fault and the thrust faults in the area. Drilling may well extend into the Sweetwater Canyon area.

1 We hold that the mining claims staked after October 21, 1976 were legally done. They should be recognized as legal since they were a fact prior to wilderness designation.

The B.L.M. request for still another examining authority for mining claims. It duplicates other regulatory authority and adds to the burden imposed upon the industry.

2 This area is good summer range for sheep and cattle. Water and grazing are vital to these industries. Riparian meadows form the best of the grazing in this area. No termination of water or riparian rights should be considered. No fencing off of these areas should ever be considered.

3 The recreational value of the area is high. This usage requires access. We object to the proposed closing of the Strawberry creek road and the Overlook road.

The Sweetwater Rocks WY 030-120,122,123a and 123b

4 The prime use for this area is for livestock grazing. Some springs in the area; those in Sec. 22, T. 30N, R. 90W. and in Sec. 32, T. 30N,E. 89W. are the main source of water in the area. Also affected would be the Lankin Spring in Sec. 31, T. 30N., R. 89W. These springs must have been access through your designated areas numbered 1625 and 1622.

5 The recreational potential for these areas is high, inspite of poor public knowledge of the area. Access to the roads, trails and springs of the area could well be improved to permit greater use by tourists and campers, and as a base for climbers.

6 I have personally worked in this area for 30 years, from the Gas Hills area. I have never seen Big Horn sheep or ferrets in the area. If these species are not present in what is classed as "good habitat", then maybe we don't understand what habitat these animals prefer.

The Sweetwater Rocks area is not probably high potential for major mining at this time. It is still possible that uranium and thorium may be found here in addition to the minerals and industrial rocks mentioned in your survey. These areas and the right to benefit from their claims.

The Whiskey Peak and Dubois Badlands Areas

These areas appear to be below the BLM's stated minimum for

7 Wilderness consideration. The areas do not appear in the 'Lander Wilderness Supplement, Draft Management Plan/EIS." Perhaps these areas should not be considered at this time; until the BLM complete adequate notification to the public.

We the people of the W.R.M.U.A. join the Citizens for Multiple Use, based in Dubois, Wyoming, in opposing Wilderness status for these areas.

Conclusions

1. There shall be no more wilderness in the state of Wyoming.
2. The W.R.M.U.A. oppoees any more Wilderness in the State of Wyoming.
3. Water rights are the exclusive control of the State of Wyoming.
4. The Dubois Badlands and the Whiskey Peak W.S.A. should not become wilderness. The BLM has not given sufficient notice to the public to consider these area for Wilderness designation.
4. Never has so much land been given over to the use of so few, by so many (the people of Wyoming)
5. In the consideration of Wilderness from WSA. studies, the people of Wyoming should be the sole decision makers. This eliminates non-residents users from out of state in the decision making process.

8 6. The Split Rock area of historical significance, might be better served by a 20 - 40 acre national historical monument designation, thus there would be no need for a wilderness designation of the rest of the Sweetwater Rocks area.

9 7. If wilderness areas are to be foisted off upon the people of Wyoming, then equal acreage (49,089 acres, with Whiskey Peak and the Dubois Badlands) should be subtracted from the existing Wilderness inventory, and returned to multiple use. Areas for possible consideration might include: summer pasture lands, timber lands, favorable recreation areas, or mining areas. These lands should come from the Bridger-Teton area or the Shoshone Wilderness.

8. Wilderness, by definition, is remote and rugged country. Better roads into it might make these areas accessible to our senior citizens, who are currently excluded from and possibly discriminated against, in the Wilderness land classification. Such an area might be the extension of the road to Big Sandy opening, as far as Big Sandy lake.

3. Access to the Sweetwater Canyon Overlook and Strawberry Creek involves 1½miles of vehicle trails leading to the edge of the canyon. The closure would eliminate problems caused by ORVs such as the watershed erosion on the Strawberry Creek access, but would require recreationists to walk to the river at these locations. Vehicle access to the river would still be available at either end of the WSA.

4. The primary use for the Sweetwater Rocks proper is wildlife use. No forage allocation for livestock has ever been made in these rock areas. Forage is allocated to livestock in areas outside the Sweetwater Rocks proper. The springs you mention provide water for both livestock and wildlife.

5. Management under the Proposed Action would attempt to retain the area's natural qualities by not allowing recreation developments, major utilities, or upgrading of roads.

6. Very few people have ever seen a black-footed ferret. They are an extremely rare and extremely selective animal. We do know that they depend largely upon prairie dog colonies for existence. It is possible that black-footed ferrets do exist in the prairie dog colonies near the Sweetwater Rocks. As stated in the EIS, no ferret searches have been made in these colonies. Ferrets were recently found to exist in the Meeteetse area even though people living in the area for 50 years or longer thought they had become extinct.

7. The Dubois Badlands WSA and the Whiskey Mountain WSA near Dubois are being studied under a separate document. (Whiskey Peak, near Jeffrey City, is not a WSA). The study process includes public notification and comment periods.

8. Split Rock is listed on the National Register of Historic Places. This encompasses 160 acres of a 640-acre withdrawal area.

9. Only Congress can designate wilderness. Through FLPMA, Congress directed the BLM to do wilderness studies on public lands.

9. We specifically oppose all the W.S.A. areas to Wilderness classifications within the Lander Wilderness Supplement.

cc: Senator Malcom Wallop
Senator Allan Simpson
Representative Dick Cheney

William G. King

16

SIERRA CLUB

PUBLIC LANDS COMMITTEE

12623 -- 10th Ave. N.E.
Seattle, WA 98125
(206) 362-5269
February 13, 1986

Jack Kelly, Manager
Lander Resource Area
Bureau of Land Management
P. O. Box 589
Lander, WY 82520

Dear Sir:

With considerable alarm and disappointment, I recently learned that the BLM has recommended against all or part of three Wilderness Study Areas (WSAs) in the Lander Resource Area. Considering the small acreage involved in the Wilderness Review process, the BLM should have recommended in favor of the All Wilderness alternative.

1 While noting correctly the fine recreational opportunities and the wildlife habitat in the area, the BLM should have favored Wilderness status for the entire Sweetwater Canyon WSA.

2 The recommendations against Sweetwater Rocks and Copper Mountain are wholly unjustified. Indeed the BLM could not find one important conflict between Wilderness and other uses in the Sweetwater Rocks. It should be clear to the BLM that, without Wilderness protection, the rest of Copper Mountain will eventually be ruined by mineral exploration. Both WSAs have recreational values as well as critical wildlife habitat.

Your office's non-wilderness recommendations are especially difficult to understand when the threats to these wild places are so obvious. Even the most casual visitor to your Resource Area knows that roads, oil and gas exploration, and off-road vehicles have wrecked the vast majority of BLM lands, and if unchecked by Wilderness designations, will lay waste to what little remains natural.

For this reason, I urge you to recommend all the WSAs, and all the acreage within those units, in your Resource Area for Wilderness designation. This would include Whiskey Mountain and

Responses to Letter 16

1. The partial wilderness recommendation includes the "core area" of the Sweetwater Canyon WSA—the canyon itself. This alternative would eliminate conflicts with any resource that required motorized access on a routine basis. It would include in the designated wilderness the area containing the river and canyon setting and exclude some mining claims that could conflict with wilderness management.

2. In the Sweetwater Rocks WSAs, the wilderness character of the area is not expected to change even if the WSA is not designated, since there is little potential for mineral development.

   The potential for oil and gas occurrence in Copper Mountain WSA is moderate. If requested, commodity development would be allowed under the proposed action. Any development would be subject to the surface protection stipulations shown in Appendix B. These stipulations are applied to prevent erosion, losses of water quality, and disturbance to wildlife.

the Dubois Badlands, which, as you know, contain critical habitat for bighorn sheep.

Thank you very much. Would you please inform me of your final decision?

Sincerely,

James M Baker

James M. Baker, Chair
BLM Wilderness Subcommittee
National Public Lands Comm.
Sierra Club

17

FRIENDS OF
WILD WYOMING DESERTS
P.O. Box 843, Lovell WY 82431

February 15, 1986

Mr. Jack Kelly
Lander Resource Area
P.O. Box 589
Lander, Wyoming 82520

Dear Mr. Kelly:

While Friends of Wild Wyoming Deserts appreciates the opportunity to comment on the Draft Environmental Impact Statement for Lander Resource Area's Resource Management Plan, I must note with deep concern your failure to notify us of the public meeting dates and comment deadline--despite the fact that we expressed interest months before the draft was released. I request your explanation of such manifest delinquency, which leads one to question whether BLM is sincerely interested in gathering public input on the RMP.

Based on careful reading and review, the major goal of the RMP appears to emphasize commodity production above all other values. Desert Friends cannot support this plan which disregards BLM's mandate for multiple-use management.

This emphasis on commercial development is shown in the three oil and gas alternatives to present management. They all call for increased acreage open for leasing. Indeed, the preferred alternative proposes opening the entire resource area for oil and gas and phosphate development. At very minimum, the following areas should be withdrawn from oil and gas, locatable mineral, and phosphate development: lands around Sinks Canyon State Park, Red Canyon, Lander Slope, South Pass, Whiskey Mountain, East Fork, and Dubois Badlands. Unique cultural and natural resources in these areas deserve the highest degree of protection.

The RMP's commodity production slant is evident in proposed forest management. The preferred alternative recommends 6.2 MMBF of timber harvested annually--an increase of over 100 percent from the current level of 3.0 MMBF. Friends of Wild Wyoming Deserts insists that timber should not be harvested on the Lander Slope and South Pass Management Units. Even small volumes taken there would not be worth additional roads and impacts on watersheds.

The preferred plan for grazing also concentrates on costly, publicly-financed development. It calls for construction of 45 to 55 miles of fence, 10 reservoirs, and 57 other water projects, and for 8500 acres to be burned or sprayed with herbicide to reduce sagebrush.

Responses to Letter 17

1. The ratings for the potential of an oil and gas discovery in the Sweetwater Canyon and Sweetwater Rocks are low to none, respectively. Accordingly, we do not project any oil and gas exploratory activity in these WSAs. Wilderness designation would close these lands to any oil and gas leasing exploration and development so that the possibility of any future discoveries would be foregone. Although the U.S. Geological Survey rated the Copper Mountain WSA as having a low potential for an oil and gas discovery, our more recent rating indicates a moderate to high potential for the occurrence of oil and gas. A well drilled on the edge of this WSA found several thousand cubic feet of natural gas in different rock formations. The subsurface geology in the Copper Mountain WSA is very favorable for the entrapment of hydrocarbons. Wilderness designation would preclude the exploration and development of this high to moderate potential area. As you will note in Chapters 2 and 4, we project some oil and gas development in the Copper Mountain WSA.

   While there are no pre-FLPMA leases in the WSAs, this does not mean there has not been an interest in leasing. Applications to lease within the WSAs have been rejected. During any given five- or ten-year period, several thousand

We oppose the use of herbicides and new developments for the benefit of privately-owned stock. Watershed, wildlife, and vegetative resources should be improved through a reduction in livestock grazing, rather than the possible increase of up to 21 percent. Riparian zones in the resource area have long been in need of greater protection, and should now be seriously addressed.

The RMP states that public lands in the resource area are available for utility systems on a demand basis. We must oppose this provision and insist that BLM accept its responsibility, rather than leave protection of many pristine areas in the hands of developers.

While advocating many actions which degrade natural ecosystems, BLM proposes little to defend a fragile ecosystem, or even to mitigate environmental impacts. Restrictions contain weak wording, such as "where needed", "when possible", and "subject to waiver." The draft fails to name parties responsible for monitoring and ensuring protection during development activities. Should budget cuts occur, it is unclear how BLM will prevent unchecked environmental impacts.

Desert Friends urges protection of natural and cultural values. The portions of Beaver Creek, Gas Hills, Lander Slope, Red Canyon, and South Pass Management Units stated in the dEIS, as well as the Oregon/Mormon Trail corridor, deserve designation as Areas of Critical Environmental Concern. We support Beaver Rim and Red Canyon as National Natural Landmarks, and South Pass as a National Register district.

We appreciate efforts to preserve historic structures and rock art. However, there remains a great need for further archeological inventories across the resource area.

We call for maximum protection of crucial and critical wildlife range. We also advocate habitat improvement without the use of herbicides and fertilizers. Efforts to restore Bighorn sheep to their former homeland in Sweetwater Rocks, as mentioned in the RMP, would be an extremely valuable project.

Our comments for Sweetwater Rocks, Sweetwater Canyon, and Copper Mountain Wilderness Study Areas are included in the accompanying position statement. All six areas, as well as Whiskey Mountain and Dubois Badlands, should be included in the National Wilderness Preservation System. We look forward to receiving the dEIS for the latter two areas.

As BLM revises the Lander plan, we hope that non-commodity uses will be carefully appraised. Most of the resource area has already sustained a tremendous amount of exploitation and degradation. It is long past time for BLM to protect remaining wild areas and values, and to begin balanced multiple-use management.

Sincerely,

Lynn Kinter
Director

cc: Senator David R. Nichols; Travel, Recreation, and Wildlife Committee
Representative Peg Shreve; Travel, Recreation, and Wildlife Committee
Congressman Richard Cheney
Senator Alan Simpson
Senator Malcolm Wallop

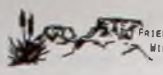
leases on public lands are never drilled, but that does not positively identify the lands as having no potential for oil and gas resources. The absence of pre-FLPMA leases in the WSAs does not identify the lands as having no potential or high potential for oil and gas.

2. As indicated in this document (Chapter 1), livestock grazing would continue at present levels even under the All Wilderness alternative for each WSA. There would be only minor changes in the permittees' operations.

3. See Response 5 to Letter 14.

4. Vehicle restrictions in the wilderness alternatives would limit motorized recreation use, but this was not expected to have a major impact in any of the the WSAs. Copper Mountain would continue to be used primarily for hunting, and access would be available along the east boundary. Access to and within the Sweetwater Rocks WSAs is dictated by the topography and land ownership pattern. Lankin Dome, the unit on the far west end, is bordered by a county road. Vehicular access to other portions of the Sweetwater Rocks WSAs would require road improvements and/or easements. Please refer to Chapter 4 in the Final EIS.

5. This issue has been eliminated from the final EIS. Please see Chapter 1.



FRIENDS OF
WILD WYOMING DESERTS
P.O. Box 843, Lovell WY 82431
2/10/86

"FRIENDS" CALLS ON BLM TO MEET ITS WILDERNESS MANDATE

The Lander Resource Area of central Wyoming has released a Draft Resource Management Plan/Environmental Impact Statement and a Wilderness Supplement for six Wilderness Study Areas. These WSAs total 48,089 acres--1.9 percent of the land managed by Lander Resource Area. To our disappointment, the Bureau of Land Management recommends designation for only part of Sweetwater Canyon WSa--5760 acres.

BLM states--and we wholeheartedly agree -- that all the WSAs have exceptional wilderness values, outstanding opportunities for solitude and primitive recreation, and many special features.

·Copper Mountain WSA, 6858 acres of steep canyons and rocky slopes, has spectacular views and crucial deer and antelope winter range.

·Sweetwater Canyon, 9056 acres along Sweetwater River, provides critical moose and elk winter range and "Class 1" waters for wild brown, brook, and rainbow trout. Although they are not mentioned in the Draft, we have seen wild horses several times on the rolling hills above the canyon.

·Sweetwater Rocks--A complex of four WSAs totaling 32,175 acres--were frequented by Native Americans as long as 12,000 years ago, and by Oregon trail emigrants more recently. Huge granite domes in Sweetwater Rocks were landmarks for pioneers and now offer world class rock climbing.

Sweetwater Canyon and Sweetwater Rocks contain three ecosystem types not represented in the National Wilderness Preservation System. According to the Draft, all the WSAs would be manageable as wilderness.

1 BLM addresses several concerns in the Draft EIS--but with peculiar logic. The first is that "designation would adversely affect mineral development." However, oil and gas potential in Sweetwater Canyon and Sweetwater Rocks has been rated as low to none, and US Geological Survey rated potential in Copper Mountain as low, although BLM rated it high. None of the areas have pre-FLPMA oil and gas leases (valid rights predating October 22, 1976). Potential for development of other minerals is low in all six areas.

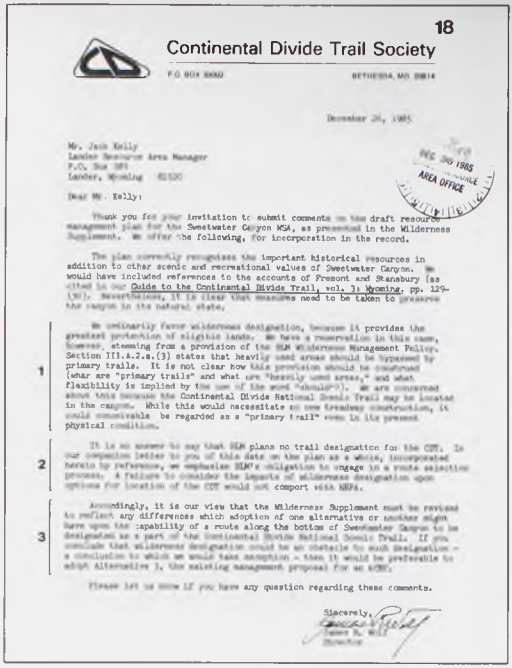
2 BLM also considers effects of designation on the livestock industry. According to the Draft, grazing would remain basically the same, and any vehicle restrictions would have little effect on management.

3 However, some of the private landowners near Sweetwater Rocks object to having a wilderness bordering their ranches. That appears the major--if not only--reason for failure to recommend this complex of national significance. The Draft actually states that designation for each area is expected to cause few, if any, socioeconomic impacts.

4 BLM is concerned that vehicle restrictions will limit recreation use. Yet Copper Mountain is uncroaded, and short two-track ways total only 3 miles in each of the other two areas. Sweetwater Rocks access seems to be the main concern, since the complex is largely surrounded by state and private land. Visitors cannot drive to the boundaries on public roads, but can walk to them on public land. Currently, private citizens allow access across their land.

5 BLM also raises the issue of possible overuse due to wilderness classification. But this has never been the case in Wyoming. This is the weakest possible rationale, an obvious attempt to avoid meeting the clear mandate of law.

Congress has directed BLM to provide wilderness opportunities for the public. Friends of Wild Wyoming Deserts hereby requests, and urges, that Lander Resource Area revise the Resource Management Plan/Environmental Impact Statement to recommend designation for all six areas reviewed. Our members and supporters should communicate their feelings to Mr. Jack Kelly, Area Manager, Lander RA, PO Box 589, Lander WY 82520, and to members of Congress. We shall continue to monitor and report on developments. For the present we call on BLM and the Department of the Interior to respond in a positive manner.



18

Continental Divide Trail Society

P.O. BOX 8082 BETHESDA, MD 20814

December 26, 1985

Mr. Jack Kelly
Lander Resource Area Manager
P.O. Box 589
Lander, Wyoming 82520

DEC 30 1985
AREA OFFICE

Dear Mr. Kelly:

Thank you for your invitation to submit comments on the draft resource management plan for the Sweetwater Canyon WSA, as presented in the Wilderness Supplement. We offer the following, for incorporation in the record.

The plan correctly recognizes the important historical resources in addition to other scenic and recreational values of Sweetwater Canyon. We would have included references to the accounts of Fremont and Skramburg (as cited in our Guide to the Continental Divide Trail, vol. 3: Wyoming, pp. 129-130). Nevertheless, it is clear that measures need to be taken to preserve the canyon in its natural state.

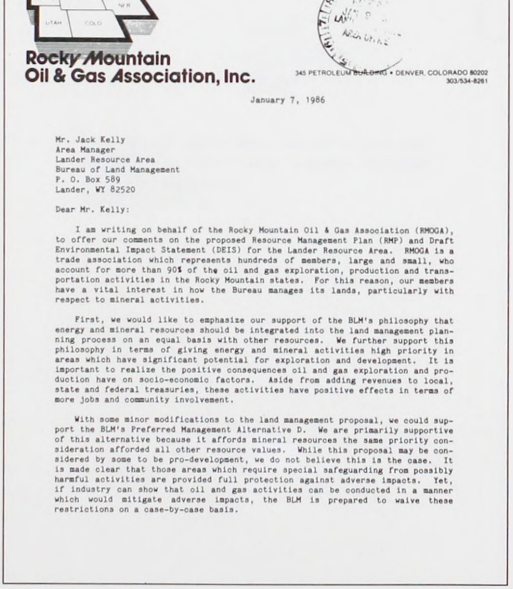
1 We ordinarily favor wilderness designation, because it provides the greatest protection of eligible lands. We have a reservation in this case, however, stemming from a provision of the BLM Wilderness Management Policy. Section III.A.2.a.(3) states that heavily used areas should be bypassed by primary trails. It is not clear how this provision should be construed [what are "primary trails" and what are "heavily used areas," and what flexibility is implied by the use of the word "should"?]. We are concerned about this because the Continental Divide National Scenic Trail may be located in the canyon. While this would necessitate no new treadway construction, it would conceivable be regarded as a "primary trail" even in its present physical condition.

2 It is no answer to say that BLM plans no trail designation for the CDT. In our companion letter to you of this date on the plan as a whole, incorporated herein by reference, we emphasize BLM's obligation to engage in a route selection process. A failure to consider the impacts of wilderness designation upon options for location of the CDT would not comport with NEPA.

3 Accordingly, it is our view that the Wilderness Supplement must be revised to reflect any differences which adoption of one alternative or another might have upon the capability of a route along the bottom of Sweetwater Canyon to be designated as a part of the Continental Divide National Scenic Trail. If you conclude that wilderness designation would be an obstacle to such designation - a conclusion to which we would take exception - then it would be preferable to adopt Alternative 1, the existing management proposal for an NCA.

Please let us know if you have any question regarding these comments.

Sincerely,



19

Alice I. Frell
Lands Director

Rocky Mountain Oil & Gas Association, Inc.

345 PETROLEUM BUILDING • DENVER, COLORADO 80202
303/534-8261

January 7, 1986

Mr. Jack Kelly
Area Manager
Lander Resource Area
Bureau of Land Management
P. O. Box 589
Lander, WY 82520

Dear Mr. Kelly:

I am writing on behalf of the Rocky Mountain Oil & Gas Association (RMOGA), to offer our comments on the proposed Resource Management Plan (RMP) and Draft Environmental Impact Statement (DEIS) for the Lander Resource Area. RMOGA is a trade association which represents hundreds of members, large and small, who account for more than 90% of the oil and gas exploration, production and transportation activities in the Rocky Mountain states. For this reason, our members have a vital interest in how the Bureau manages its lands, particularly with respect to mineral activities.

First, we would like to emphasize our support of the BLM's philosophy that energy and mineral resources should be integrated into the land management planning process on an equal basis with other resources. We further support this philosophy in terms of giving energy and mineral activities high priority in areas which have significant potential for exploration and development. It is important to realize the positive consequences oil and gas exploration and production have on socio-economic factors. Aside from adding revenues to local, state and federal treasuries, these activities have positive effects in terms of more jobs and community involvement.

With some minor modifications to the land management proposal, we could support the BLM's Preferred Management Alternative D. We are primarily supportive of this alternative because it affords mineral resources the same priority consideration afforded all other resource values. While this proposal may be considered by some to be pro-development, we do not believe this is the case. It is made clear that those areas which require special safeguarding from possibly harmful activities are provided full protection against adverse impacts. Yet, if industry can show that oil and gas activities can be conducted in a manner which would mitigate adverse impacts, the BLM is prepared to waive these restrictions on a case-by-case basis.

Responses to Letter 18

1. Designating Sweetwater Canyon as wilderness would not preclude consideration of the canyon as a possible route for the Continental Divide National Scenic Trail. The section of the BLM wilderness policy to which you refer concerns minimizing conflicts associated with concentrated visitor use but allows sufficient flexibility so that reasonable alternatives need not be forgone. Some important factors to consider when we evaluate the canyon as a possible route include livestock use, visitation, primary or side trail routes, or co-locating the Continental Divide National Scenic Trail and the Oregon/Mormon Pioneer National Historic Trail.

2. We recognize our responsibility for route selection which will be accomplished with the use of management guidelines established in the Lander RMP/EIS for the various land uses along the Continental Divide. More detailed planning and more specific guidance will be developed in the future.

3. We have not identified any impacts that designation or nondesignation would have on the potential for Sweetwater Canyon as a route alternative for the Continental Divide National Scenic Trail. Nothing being considered in this EIS would preclude consideration of Sweetwater Canyon as a possible route for the Continental Divide National Scenic Trail.

Response to Letter 19

1. There are no oil and gas leases in Sweetwater Canyon WSA. You are correct in saying that the opportunity to explore for and develop oil and gas resources would be forgone under wilderness designation. However, information used in our analysis indicates that there is no potential for oil and gas in the Sweetwater Canyon WSA. Therefore, the true effect on future leaseholders would be negligible because of the very small likelihood that development would occur under any alternative.

January 7, 1986

Mr. Jack Kelly
Area Manager
Lander Resource Area
Bureau of Land Management

page two

This approach seems only reasonable since it provides industry with the opportunity to devise new ways in which to conduct its operations. New technology may be developed which could improve how industry operates in sensitive areas. When industry is constrained to operate in a rigidly specific manner, there is minimal opportunity to develop new methods. Performance standards, rather than design standards, provide for more flexibility, thereby encouraging new ideas on how to mitigate adverse impacts.

The BLM has gone to great lengths to compile and analyze resource data for the RMP in terms of existing resources and possible environmental consequences which would result from various activities. The BLM has indicated that certain tradeoffs were made between energy and mineral resources and sensitive environmental values, but only where the mineral potential was considered significant enough to warrant top consideration. Even so, when a potentially impacted sensitive resource exists in an area with high potential, the BLM is committed to protecting this resource in a reasonable manner and in accordance with existing laws governing such activities.

We believe, however, that the BLM should modify this standard to include areas rated as having moderate potential for oil and gas. According to Table 4-1, Percent of Total Wells Drilled . . ., found on Page 191 of the proposed Plan, it is apparent that nearly as many wells are drilled in areas considered to have moderate potential as those drilled in high potential areas. These statistics indicate that the moderate areas are just as important in terms of oil and gas exploration and potential discoveries as are the high potential areas. The rationale for adding more severe constraints to these areas is lacking. Instead of merely considering the potential of an area, the level of activities and mineral interest should also be included in the determinations as to appropriate stipulations to be applied.

We do not support the BLM's decision regarding wilderness recommendations. The BLM has determined that the Sweetwater Canyon Wilderness Study Area is suitable for wilderness. However, it seems unreasonable that the BLM has chosen to recommend as wilderness an area covered with oil and gas leases. The wilderness study policy provides a specific set of criteria by which these decisions are made. These include ecological diversity and balancing the geographic distribution of wilderness areas. Wyoming already maintains over three million acres of wilderness, and has reasonable access to much more. Therefore, additional wilderness considerations must be weighed particularly in conjunction with other resource needs and uses. The fact that five of the six WSAs in the Lander RA do not meet the established wilderness criteria is justification enough for not recommending them as wilderness. However, we believe it is irresponsible to recommend additional wilderness just for the sake of creating more wilderness. If the Sweetwater Canyon WSA, covered with oil and gas leases, were to be designated as wilderness, rights of leaseholders to explore for oil and gas resources would be jeopardized. 1

January 7, 1986

Mr. Jack Kelly
Area Manager
Lander Resource Area
Bureau of Land Management

page three

There is one point which needs clarification in the Final RMP: that is the discussion on Page 188, Environmental Consequences, regarding No Surface Occupancy (NSO) stipulations. It is stated on Page 188 that 659,000 acres of the Lander Resource Area are subject to NSO stipulations; while Table 2-3 on Page 83 indicates that 171,000 acres are subject to NSO stipulations. Apparently there are different types of NSO stipulations: those which may be waived and those which are mandated by management direction. We urge the BLM to be more specific in its discussion of these stipulations and to incorporate a comparison into the Plan.

An additional concern we would like to address is the lack of discussion on the Oregon and Mormon Pioneer National Historic Trails. It is our opinion that the documents which were released earlier this year should have been prepared as a major revision to the Platte RMP and the Kemmerer RMP, and should have been included in the Lander RMP. We are unsure as to how the management decisions contained in the Trails Plan will be utilized in conjunction with the RMP. We further believe that the proposed Trails Plan adds yet another layer of restriction which is unnecessary when viewed in light of other regulations already in existence. For example, a 1/4 mile buffer zone on either side of the trails or the visual horizon is unreasonable. These types of buffer zones would cause an undue burden to operators who find that rerouting of pipelines or other rights-of-way are cost-prohibitive. A 1/2 mile buffer zone removes hundreds of thousands of acres from surface occupancy for oil and gas activities. It is our opinion that a width of 100 feet or so total corridor is more reasonable. There are existing operations which are within 100 feet of the Oregon Trail and which cause no impacts to the Trail. When such evidence is currently available, we see no reason to further constrain activities.

In conclusion, we support the BLM's proposed land management decisions, provided that the above-mentioned modifications are made. It is our opinion that these changes will make a more reasonable, balanced plan.

Thank you for your consideration of our comments. We would be happy to discuss our views with you. Please do not hesitate to contact me if you have any questions.

Sincerely,

Alice I. Prall

Alice I. Prall
Public Lands Director

20

TRUE OIL COMPANY

RIVER CROSS ROAD

CASPER, WYOMING
P.O. DRAWER 2360
PHONE 237-9301
82602

January 7, 1986

Mr. Jack Kelly
Area Manager
Lander Resource Area
Bureau of Land Management
P. O. Box 589
Lander, WY 82520

Dear Mr. Kelly,

The following are True Oil Companies' comments concerning your Resource Management Plan/Wilderness Study on the Lander Resource Area.

You and the BLM are to be complimented for finally giving oil and gas exploration, developement and production an increased weight when deciding priority considerations in sensitive areas -- though it still appears that oil and gas is not being given equal weight with other multiple use natural resourses such as "wilderness". You made certain tradeoffs between oil and gas and sensitive areas, but only when the oil and gas potential was high enough to be considered significant. When a sensitive area is located in an area with high oil and gas potential, the BLM is already committed to comply with existing laws which protect these resources. Therefore, it is our belief that the BLM should modify this standard to include areas which have a moderate potential for oil and gas.

In Table 4-1 of your own plan on Page 191 of the Proposed Plan, it is obvious that there were almost as many wells drilled in areas of moderate potential as there were in areas of high potential -- and this holds true, not only in the Lander resourse area, but in other areas also. This indicates that areas of moderate potential are just as important in exploring for and discovering oil and gas as are the high potentail areas. The amount of activity in an area should certainly be one of the points considered in determining what stipulations should be applied to that particular area and certainly more severe stipulations should not be added just because you have accumulated statistics that indicate the area has only moderate potential for oil and gas discovery.

In your plan, you state that there must be ecological diversity and the wilderness areas must have geographic distribution.

It should be pointed out that Wyoming already has over three million acres of wilderness and the Wyoming Wilderness bill has been passed concerning Forest Service lands which added well over a million acres of additional Forest Service wilderness lands. Most of the wilderness study areas in the Lander Resourse Area do not meet established wilderness criteria and therefore should not be recommended as wilderneas. With Wyoming already having such a tremendous amount of established wilderness, it is absolutely ridiculous to recommend lands for a wilderness designation just for the sake of creating more wilderness. We, therefore, strongly oppose BLM's recommendation for more wilderness at the expense of oil and gas lessees and other lessees.

It would be greatly appreciated if you would clarify the discussion on Page 188, Environmental Consequences, concerning No Surface Occupancy stipulations. On this page you state that 650,000 acres of the Lander Resource Area are subject to NSO stipulations, whereas, Table 2-3 on Page 43 indicates that 171,000 acres are subject to NSO stipulations -- why the difference? Are there different NSO stipulations? If so, would you please let me know what they are. If there are not different NSO stipulations, then you are strongly urged to be more clear in you discussing of the stipulations.

The Mormon Pioneer and the Oregon National Historic Trails should have had more discussion in your plan. There should be discussion in your plan how the Trails Plan will dovetail with it concerning decisions. There is no question that the proposed Trails Plan adds one more layer of restrictions which is really unnecessary with the other regulations already in place. A 1/4 or 1/2 mile buffer zone on each side of the trails is totally unreasonable. There are many existing operations a very short distance from the Oregon Trail which cause no impacts on the Trails whatsoever. With such proof being available there is no reason to apply additional constraints.

Thank you for the opportunity of commenting on your plan and once again you are to be complimented on giving other multiple uses of public lands additional weight -- though you still have a way to go before they are weighted equally.

Sincerely yours,

Robert O. Byron
Administrative Asst.
to H. A. True, Jr.

ROB/far

Response to Letter 20

Thank you for your comments.

21

PETROLEUM ASSOCIATION OF WYOMING

a division of Rocky Mountain Oil and Gas Association

330 South Center, Suite 115
Casper, Wyoming 82601
(307) 234-5333

Richard T. Robitaille
Executive Director
Wendy H. Frueauf
Associate Director

January 17, 1986

RECEIVED
JAN 21 1986
LANDS & RESOURCES
AREA OFFICE

Mr. Jack Kelly
Lander Resource Area
Bureau of Land Management
P.O. Box 589
Lander, Wyoming 82520

Re: Lander Resource Management Plan and Wilderness Supplement

Dear Mr. Kelly:

On behalf of the Petroleum Association of Wyoming, a division of the Rocky Mountain Oil and Gas Association, whose members account for 90% of the petroleum produced and 90% of the wells drilled in Wyoming, please accept the following comments on the Lander Resource Area Management Plan and Wilderness Supplement.

PAW is in general support of the Preferred Alternative "D". While there are several clarifications and modifications which we would recommend, the draft plan does a commendable job of affording oil and gas resources the same priority consideration afforded other resource values. We are pleased that the proposal considers the importance of coordinating energy and mineral activities with other multiple uses and recognizes mineral potential as a factor in determining management decisions. This approach, we believe, provides a meaningful management tool, and assists the BLM in meeting the requirements of federal planning laws.

The Preferred Alternative provides that energy and mineral resources will receive priority treatment in areas determined to have high potential. We believe this BLM policy should be modified to also include areas rated as having moderate potential for oil and gas. The research incorporated into Table 4-1 (p. 191) indicates that almost as many wells are drilled in areas considered to have moderate potential as those drilled in high potential areas. It is apparent that moderate areas are of equal importance in the discovery of new oil and gas reserves as the high areas. Similar management should apply, not more severe restrictions. We are confident that this policy could be so modified, while maintaining full protection of sensitive resource values.

The draft plan does a good job of describing what kinds of stipulations may apply to oil and gas operations. Total affected acreage figures are provided as well as maps indicating the areas involved. While this information is

RECEIVED
JAN 21 1986
LANDS & RESOURCES
AREA OFFICE

helpful there does appear to be some confusion in regard to total no surface occupancy (nso) acres. Table 2-3 (p. 43) shows nso restrictions on 171,000 acres. Various discussions in the document, however, offer conflicting figures such as 650,000 acres subject to statewide standard nso stipulations and 65,000 acres subject to site-specific nso stipulations, (p. 188). On the other hand a reference on page 271 to Table 4-1 (which we believe is actually Table 4-4) discusses 150,000 acres of area wide nso restrictions. We understand that there are different types of nso stipulations, some which may be waived, some mandated, some area wide and some statewide. Therefore, we urge the BLM to clarify the use of the term and correct the figures where appropriate for better understanding.

Appendix 2 lists the standard protection requirements for surface disturbing activities, including oil and gas operations. The "guidance" discussions following each stipulation are very good explanations of the proper use of those restrictions. We note that legal descriptions will be required for wildlife stipulations and should be measurable and legally definable. We are also pleased to see the reminder that when considering a no-lease option, a rigorous test must be met and fully documented in the record. We urge continued adherence to these policies.

We suggest the final plan incorporate a more detailed discussion of the Oregon/Mormon Pioneer Trail Plan than is currently provided (p. 21). The proposed Trail Plan represents an additional layer of regulation, and should be included in this and other affected resource area plans. At this point, we are unsure as to how the Trail Plan management decisions relate to the Preferred Alternative. Please provide further clarification.

1 PAW is in support of all of the "nonsuitable for wilderness designation" recommendations in the Wilderness Supplement. We do not concur, however, with the partial wilderness designation of the Sweetwater Canyon wilderness study area. This area contains numerous post-FLPMA oil and gas leases which would remain unexplored under the proposed action. We also question the need for additional wilderness designation because of the availability of extensive wilderness opportunities in the area and the state.

This draft plan offers detailed analysis of how oil and gas activities impact other resources, ways to minimize these effects, as well as how management decisions impact the ability to conduct oil and gas activities. We appreciate this comprehensive effort and believe that the draft proposal represents a well integrated management plan.

Sincerely,

Wendy H. Frueauf

cc: Hillary Oden
Brad Fenn
Bob Byron
Alice Frell

Response to Letter 21

1. Our analysis agrees that opportunities to develop leases in the Sweetwater Canyon would be forgone. However, information used for our analysis indicate no potential for the occurrence of oil and gas in the WSA.

22

Citizens for Multiple Use

BOX 969 • DUBOIS, WYOMING 82513

January 29, 1986

Jack Kelly, Area Manager
Bureau of Land Management
Lander Resource Area
P.O. Box 589
Lander, WY 82520

Dear Mr. Kelly:

Members of the Dubois area Citizens for Multiple Use wish to express their sincere appreciation for the opportunity to formally react to the Draft Resource Management Plan/Environmental Impact Statement.

Citizens for Multiple Use is a recently formed organization of local citizens numbering over 400 representing the greater Dubois area of Fremont County. As a group we endorse a balanced multiple use of resources including sustained forestry yield management, oil and gas exploration, prudent wildlife management of public lands, and recreation. We endorse the philosophy of good stewardship in our natural environment.

A broad based committee from the Dubois area multiple use group has reviewed the BLM draft plans and desires to go on record with the following endorsements:

1. The overall development of the plan reflects a high level of competency.

2. We compliment the BLM plan for involving those groups of people directly affected by the plan.

3. We support the position taken in the plan for the Whiskey Maountain area relative to mineral exploration which states "no surface occupancy, etc."

Jack Kelly, BLM Area Manager
Page 2
January 29, 1986

4. We support in general the "Preferred Alternative/ Plan."

As a committee we have concerns which we desire to bring to your attention. We are hopeful that you will consider the following areas:

1. We feel there are currently sufficient lands designated "wilderness areas" and that no further increases in this type of acreage are necessary.

2. We consider any wolf recovery project a direct threat to our concept of multiple use and to the stability of our environment.

We respectfully request that you place us on the BLM mailing list. We desire to be current on happenings in the BLM.

Again, we appreciate the opportunity to respond to the BLM plan.

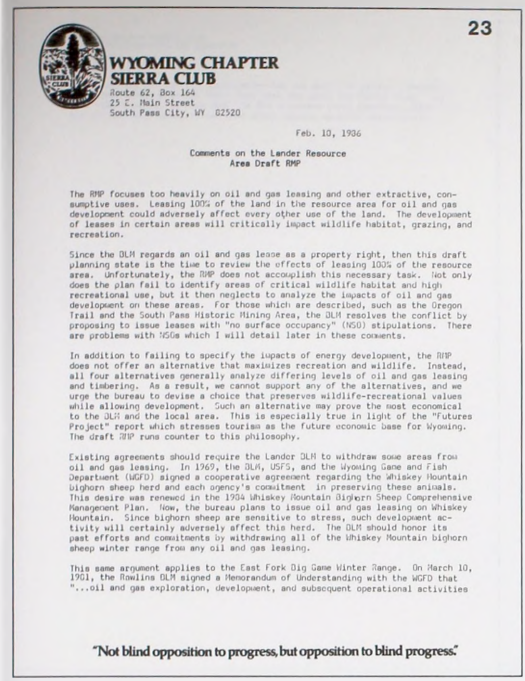
Sincerely,

James McGuire, Ph.D.
Chairman of BLM Plan
Review Committee

JM:eam

Response to Letter 22

Thank you for your comments.



23

WYOMING CHAPTER
SIERRA CLUB
Route 62, Box 164
25 C. Main Street
South Pass City, WY 82520

Feb. 10, 1986

Comments on the Lander Resource
Area Draft RMP

The RMP focuses too heavily on oil and gas leasing and other extractive, consumptive uses. Leasing 100% of the land in the resource area for oil and gas development could adversely affect every other use of the land. The development of leases in certain areas will critically impact wildlife habitat, grazing, and recreation.

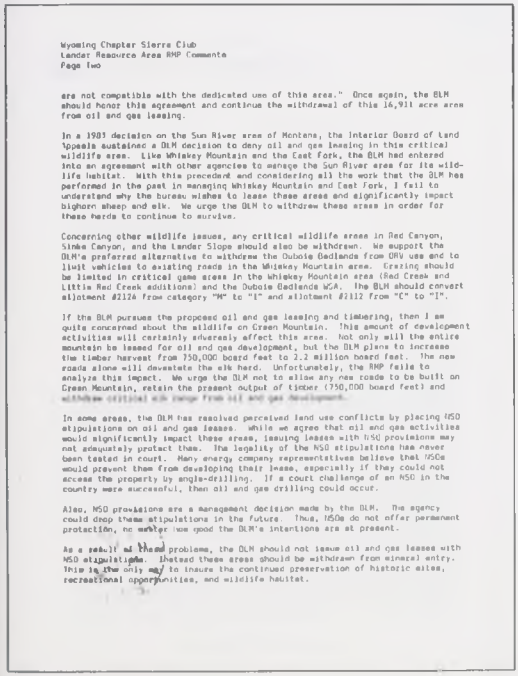
Since the BLM regards an oil and gas lease as a property right, then this draft planning state is the time to review the effects of leasing 100% of the resource area. Unfortunately, the RMP does not accomplish this necessary task. Not only does the plan fail to identify areas of critical wildlife habitat and high recreational use, but it then neglects to analyze the impacts of oil and gas development on these areas. For those which are described, such as the Oregon Trail and the South Pass Historic Mining Area, the BLM resolves the conflict by proposing to issue leases with "no surface occupancy" (NSO) stipulations. There are problems with NSOs which I will detail later in these comments.

In addition to failing to specify the impacts of energy development, the RMP does not offer an alternative that maximizes recreation and wildlife. Instead, all four alternatives generally analyze differing levels of oil and gas leasing and timbering. As a result, we cannot support any of the alternatives, and we urge the bureau to devise a choice that preserves wildlife-recreational values while allowing development. Such an alternative may prove the most economical to the BLM and the local area. This is especially true in light of the "Futures Project" report which stresses tourism as the future economic base for Wyoming. The draft RMP runs counter to this philosophy.

Existing agreements should require the Lander BLM to withdraw some areas from oil and gas leasing. In 1969, the BLM, USFS, and the Wyoming Game and Fish Department (WGFD) signed a cooperative agreement regarding the Whiskey Mountain bighorn sheep herd and each agency's commitment in preserving these animals. This desire was renewed in the 1984 Whiskey Mountain Bighorn Sheep Comprehensive Management Plan. Now, the bureau plans to issue oil and gas leasing on Whiskey Mountain. Since bighorn sheep are sensitive to stress, such development activity will certainly adversely affect this herd. The BLM should honor its past efforts and commitments by withdrawing all of the Whiskey Mountain bighorn sheep winter range from any oil and gas leasing.

This same argument applies to the East Fork Big Game Winter Range. On March 10, 1961, the Rawlins BLM signed a Memorandum of Understanding with the WGFD that "...oil and gas exploration, development, and subsequent operational activities

"Not blind opposition to progress, but opposition to blind progress."



Wyoming Chapter Sierra Club
Lander Resource Area RMP Comments
Page Two

are not compatible with the dedicated use of this area." Once again, the BLM should honor this agreement and continue the withdrawal of this 16,911 acre area from oil and gas leasing.

In a 1983 decision on the Sun River area of Montana, the Interior Board of Land Appeals sustained a BLM decision to deny oil and gas leasing in this critical wildlife area. Like Whiskey Mountain and the East Fork, the BLM had entered into an agreement with other agencies to manage the Sun River area for its wildlife habitat. With this precedent and considering all the work that the BLM has performed in the past in managing Whiskey Mountain and East Fork, I fail to understand why the bureau wishes to lease these areas and significantly impact bighorn sheep and elk. We urge the BLM to withdraw these areas in order for these herds to continue to survive.

Concerning other wildlife issues, any critical wildlife areas in Red Canyon, Sinks Canyon, and the Lander Slope should also be withdrawn. We support the BLM's preferred alternative to withdraw the Dubois Badlands from ORV use and to limit vehicles to existing roads in the Whiskey Mountain area. Grazing should be limited in critical game areas in the Whiskey Mountain area (Red Creek and Little Red Creek additions) and the Dubois Badlands WSA. The BLM should convert allotment #2124 from category "M" to "I" and allotment #3112 from "C" to "I".

If the BLM pursues the proposed oil and gas leasing and timbering, then I am quite concerned about the wildlife on Green Mountain. This amount of development activities will certainly adversely affect this area. Not only will the entire mountain be leased for oil and gas development, but the BLM plans to increase the timber harvest from 750,000 board feet to 2.2 million board feet. The new roads alone will devastate the elk herd. Unfortunately, the RMP fails to analyze this impact. We urge the BLM not to allow any new roads to be built on Green Mountain, retain the present output of timber (750,000 board feet) and withdraw critical elk range from oil and gas development.

In some areas, the BLM has resolved perceived land use conflicts by placing NSO stipulations on oil and gas leases. While we agree that oil and gas activities would significantly impact these areas, issuing leases with NSO provisions may not adequately protect them. The legality of the NSO stipulations has never been tested in court. Many energy company representatives believe that NSOs would prevent them from developing their lease, especially if they could not access the property by angle-drilling. If a court challenge of an NSO in the country were successful, then oil and gas drilling could occur.

Also, NSO provisions are a management decision made by the BLM. The agency could drop these stipulations in the future. Thus, NSOs do not offer permanent protection, no matter how good the BLM's intentions are at present.

As a result of these problems, the BLM should not issue oil and gas leases with NSO stipulations. Instead these areas should be withdrawn from mineral entry. This is the only way to insure the continued preservation of historic sites, recreational opportunities, and wildlife habitat.

Responses to Letter 23

1. In the final EIS, we have changed the alternative to read simply, "No Wilderness." The area would be managed according to existing land use plans and any special stipulations that are printed therein. There would be no overriding special designation that would automatically constrain certain land uses. If the WSAs were managed thus, certain activities could occur that have been precluded under the BLM's interim management policy. To assess the impact of this, one looks at the magnitude of the activity and the likelihood of its occurrence. The analysis leads to the conclusion that in most cases anticipated activities are not extensive and that the likelihood of their occurrence is low. Thus, it is highly likely that even though the WSAs would not be designated as wilderness, their natural character would change very little over time.

2. The prime wilderness values of the Sweetwater Canyon WSA are found within the canyon itself. The Partial Wilderness alternative for the Sweetwater Canyon WSA would resolve several conflicts and would not eliminate important wilderness attributes Motorized access is a conflict that would be eliminated. Motorized vehicles are not easily kept out of the area outside the partial wilderness area. If full wilderness designation was recommended, there would be conflicts with unauthorized motor vehicle use in the wilderness area. A partial wilderness alternative eliminates this potential problem while still preserving the wilderness values of the canyon itself. We think any level of ORV use in a designated wilderness would be a management problem.

3. Please see Response 5 to Letter 14.

4. In the draft EIS, the four WSAs that make up the "Sweetwater Rocks" were analyzed together. In the final EIS, each WSA is analyzed individually, with each having an All Wilderness and a No Wilderness alternative. Thus, a possible scenario for the Sweetwater Rocks as an aggregate could be that one or more of the WSAs could be designated wilderness while the others would not. This would create the "core" you suggest. However, this scenario can be addressed only when Congress begins the formal designation process. Please refer to Chapter 1.

5. The potential for primitive, unconfined recreation in the Copper Mountains is outstanding. This is offset by a lack of water and rough terrain, and those features result in low visitation. It appears that this situation will continue despite the high use of the adjacent Boysen Reservoir and Boysen State Park.

In summary, the RMP needs to place more emphasis on preserving the resource area's wildlife and recreational opportunities. In addition, more planning is necessary in order to determine where resource development may occur without impacting other uses of the land. Essentially, a "multiple use" approach to managing the BLM Lander Resource Area is preferable to leasing 100% of the land for oil and gas development.

With regard to the Wilderness Supplement, we believe that all of the Sweetwater Canyon, Sweetwater Rocks, and Copper Mountain WSAs should be designated wilderness. With the exception of the southern end of Copper Mountain, the RMP fails to identify any resource conflicts. Conversely, the plan emphasizes the solitude and beauty of these areas. Considering that these WSAs, which comprise approximately 2% of the Lander Resource Area, are the only surviving pristine remnants of the Wind River Basin, then I do not understand the BLM's reasoning in releasing most of these WSAs for development.

1 The wording of some of the alternatives in the Wilderness Supplement demonstrates the BLM's ambivalence toward WSAs. For example, the preferred alternative for Sweetwater Rocks and Copper Mountain is the "continuation of present management." Since these areas have always been "wilderness" and no man-made development has ever occurred within their boundaries, one would naturally assume that the preferred alternative would retain the areas' wilderness status. Instead, "continuation of present management" actually means that the bureau wishes to permit activities which have never previously transpired on these lands. Thus, the wording of the alternative indicates that the BLM had never intended to manage these areas as wilderness.

In addition, the supplement continually implies that wilderness is not a multiple use. This is a fallacy. Recreation, wildlife, scientific and historic preservation, protection of water quality, hunting, clean air, and grazing are legitimate uses of a wilderness area. I do not believe that one can attain such multiple uses around an oil rig or on a strip mine. Finally, to propose leasing 100% of the resource area while preserving only .1% of the basin's natural habitat is hardly balanced or multiple use management.

2 As a result of these biases toward development, the wilderness supplement is characterized by contradictions. The bureau describes the excellent fishing, solitude, and unique natural features of Sweetwater Canyon and admits that the positive wilderness characteristics of this WSA outweigh any negative aspects of wilderness designation. Yet, the BLM chops off 3200 acres to resolve a conflict that is never completely identified. This rim area is critical in order to preserve the natural and visual integrity of one of the wildest canyons in Wyoming.

3 The agency cites some ranchers' objections to wilderness as the primary reason for releasing all of Sweetwater Rocks to development. The BLM proposes to allow ORV use of this area. It would appear that the local stockmen would be more concerned about the large influx of motorized vehicles near and in their pastures than in primitive recreational visitation, which the BLM admits is primarily dependent upon the fluctuating population of nearby Jeffrey City. Once again, it appears that the agency is looking for any excuse to release a WSA to development.

4 I also believe that Sweetwater Rocks justifies another alternative. Rather than choosing between all or no wilderness, the BLM should have devised a third alternative which encompassed the core of the area. While the Chapter supports wilderness designation for the entire WSA, a "core" alternative would permit some discussion among the BLM, ranchers, and other interested parties.

5 In the analysis of the Copper Mountain WSA, the BLM dwells on the high potential for oil and gas on the southern end of this area. However, it fails to evaluate the recreational potential of this WSA. This is a particularly serious flaw considering that Boysen State Park and Boysen Reservoir are adjacent to Copper Mountain. More than 200,000 people visit this area every year. Considering this high recreational value and the crucial winter range for deer and antelope on the northern end and considering that oil and gas development can already occur on a vast majority of the resource area, we believe that Copper Mountain should be designated as wilderness.

In summary, the Wyoming Chapter believes that all six WSAs, and the Dubois Badlands and Whiskey Mountain, should be designated wilderness. One cannot find these small precious wildlands anywhere else in the world. Why should we want to develop these lands like we are doing on 90% of the remainder of the resource area?

Even though we believe that several weaknesses exist, the RMP does have some positive aspects. The proposed management plan for the South Pass Historic Mining area is perhaps the best part of the plan. Recreation and gold mining are the primary activities in the South Pass Historic Mining District. In 1905 more than 20,000 people visited this area, primarily to enjoy the historic sites and to camp and hike. Also, this area is still the most active gold mining region in Wyoming. Panning for gold even occurs in South Pass City during the summer. The BLM recognizes these important activities by devising a balanced plan that would preserve the cultural resource while allowing small gold mining operations to continue.

We strongly concur with the stipulation in the RMP that requires plans of operations for all proposed mining operations within the historic district. By requiring this study, the BLM will insure that mining will not destroy important historical and archeological remains. This policy is the cornerstone of balancing mining and recreation in the same area. Without it, miners from outside the local communities could destroy historical sites and significantly curtail the recreational potential of this area.

We also agree with the BLM that the federal agency should continue the present mineral segregations in the historic district, espeically those in Sections 20 and 21, T29, R100, around the Carrie Shields mine, and in Willow Creek canyon from South Pass City to the Carrie Shields mine. These segregations will not only protect significant sites, but will also retain the visual integrity around the South Pass City historical area.

We also applaud the BLM's desire to manage the historic district "...toward maintaining recreational opportunities in terms of rustic, open space settings" (p. 332). We also agree with the RMP's provisions to limit ORV use to existing roads and that existing roads provide adequate access in the district.

Wyoming Chapter Sierra Club
Lander Resource Area RMP Comments
Page Five

We commend the BLM for its appreciation for and desire to preserve Wyoming's historical heritage in the South Pass area and along the Oregon Trail. As I have already noted, we hope that the BLM withdraws these important areas from oil and gas development rather than allow leasing with NSO stipulations.

24

Chevron U.S.A. Inc.
700 South Colorado Blvd., P. O. Box 599, Denver, CO 80201

[illegible]

February 14, 1986

Draft RMP/Wilderness Study
Lander Resource Area

Mr. Jack Kelly, Area Manager
Lander Resource Area
Bureau of Land Management
P.O. Box 589
Lander, Wyoming 82520

Dear Mr. Kelly:

We are in support of your Preferred Management D, because it recognizes mineral resources as a priority consideration along with sensitive resource values. However, we would like to see some minor changes to your proposal.

Your plan shows that certain tradeoffs were made between energy and mineral resources and sensitive values, but the problem is that this was done only where the mineral potential was considered significant enough to warrant top consideration. We request that this tradeoff analysis be expanded to areas with moderate oil and gas potential. According to Table 4-1, on page 191 of the Proposed Plan, almost as many wells are drilled in areas of moderate potential as in high potential areas. This indicates that the oil and gas industry recognizes these moderate potential areas as significant exploratory areas also, and the rationale for adding more severe constraints to these areas is not clear.

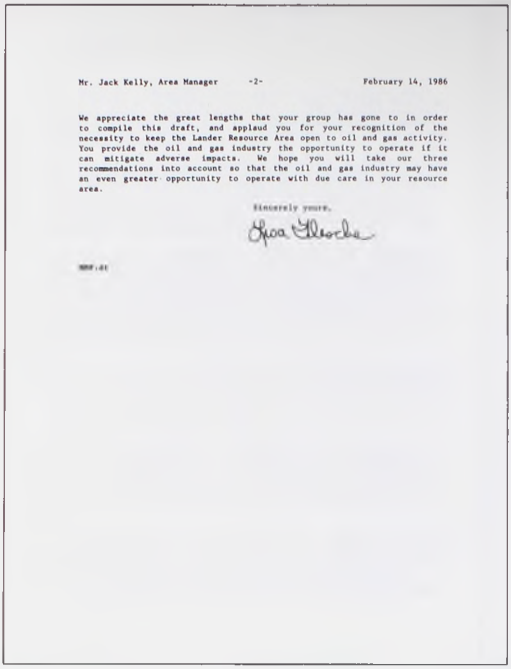
1 Secondly, Wyoming maintains over 3 million acres of wilderness. Your recommendation for more wilderness just for the sake of creating more wilderness at the expense of oil and gas lessees who would lose their rights on existing leases, is unjustifiable. We want to mitigate adverse impacts, and are willing to cooperate with you to ensure that this happens. However, once an area is designated as wilderness, almost all of the multiple uses allowed on other federal lands are prohibited.

Thirdly, we request a more specific discussion of the NSO stipulations. We understand that there are 2 types of NSO stipulations: those that may be waived and those that are mandated. We would like to know what types of NSO stipulations are being referred to on page 188, where you state that 650,000 acres of the Lander RA are subject to NSO stipulations, as well as in Table 2-3 on page 45, where you state that 171,000 acres are subject to these stipulations.

Northern Region - Exploration, Land and Production

Response to Letter 24

1. See the response to letter 19.

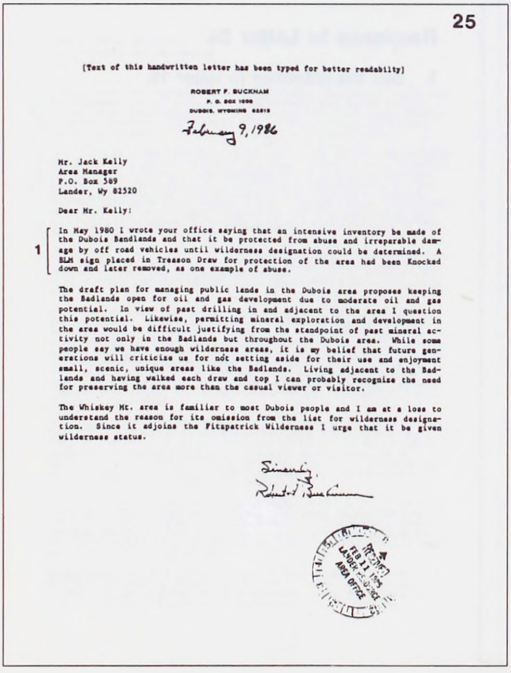


Mr. Jack Kelly, Area Manager -2- February 14, 1986

We appreciate the great lengths that your group has gone to in order to compile this draft, and applaud you for your recognition of the necessity to keep the Lander Resource Area open to oil and gas activity. You provide the oil and gas industry the opportunity to operate if it can mitigate adverse impacts. We hope you will take our three recommendations into account so that the oil and gas industry may have an even greater opportunity to operate with due care in your resource area.

Sincerely yours,

Lloyd Ellsworth



25

[Text of this handwritten letter has been typed for better readability]

ROBERT F. BUCKHAM
P. O. BOX 1696
DUBOIS, WYOMING 82513

February 9, 1986

Mr. Jack Kelly
Area Manager
P.O. Box 589
Lander, Wy 82520

Dear Mr. Kelly:

1 In May 1980 I wrote your office saying that an intensive inventory be made of the Dubois Bandlands and that it be protected from abuse and irreparable damage by off road vehicles until wilderness designation could be determined. A BLM sign placed in Treason Draw for protection of the area had been knocked down and later removed, as one example of abuse.

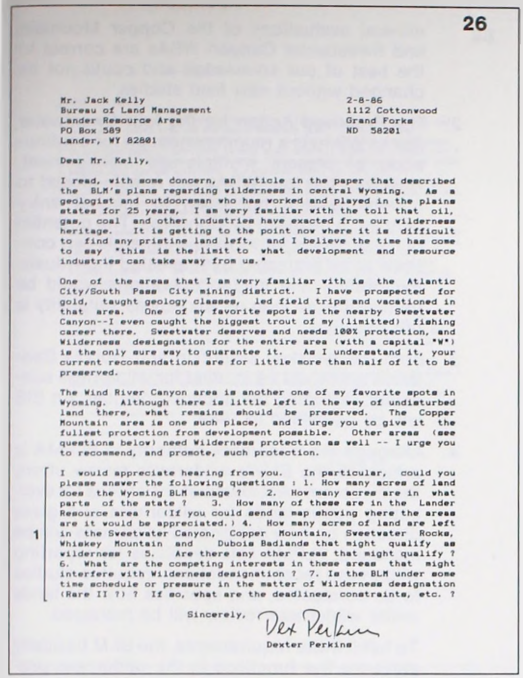
The draft plan for managing public lands in the Dubois area proposes keeping the Badlands open for oil and gas development due to moderate oil and gas potential. In view of past drilling in and adjacent to the area I question this potential. Likewise, permitting mineral exploration and development in the area would be difficult justifying from the standpoint of past mineral activity not only in the Badlands but throughout the Dubois area. While some people say we have enough wilderness areas, it is my belief that future generations will criticize us for not setting aside for their use and enjoyment small, scenic, unique areas like the Badlands. Living adjacent to the Badlands and having walked each draw and top I can probably recognize the need for preserving the area more than the casual viewer or visitor.

The Whiskey Mt. area is familiar to most Dubois people and I am at a loss to understand the reason for its omission from the list for wilderness designation. Since it adjoins the Fitzpatrick Wilderness I urge that it be given wilderness status.

Sincerely,
Robert F. Buckham

Response to Letter 25

1. The wilderness study for Dubois Badlands and Whiskey Mountain is being completed under a separate document.



26

Mr. Jack Kelly
Bureau of Land Management
Lander Resource Area
PO Box 589
Lander, WY 82801

2-8-86
1112 Cottonwood
Grand Forks
ND 58201

Dear Mr. Kelly,

I read, with some concern, an article in the paper that described the BLM's plans regarding wilderness in central Wyoming. As a geologist and outdoorsman who has worked and played in the plains states for 25 years, I am very familiar with the toll that oil, gas, coal and other industries have exacted from our wilderness heritage. It is getting to the point now where it is difficult to find any pristine land left, and I believe the time has come to say "this is the limit to what development and resource industries can take away from us."

One of the areas that I am very familiar with is the Atlantic City/South Pass City mining district. I have prospected for gold, taught geology classes, led field trips and vacationed in that area. One of my favorite spots is the nearby Sweetwater Canyon--I even caught the biggest trout of my (limitted) fishing career there. Sweetwater deserves and needs 100% protection, and Wilderness designation for the entire area (with a capital "W") is the only sure way to guarantee it. As I understand it, your current recommendations are for little more than half of it to be preserved.

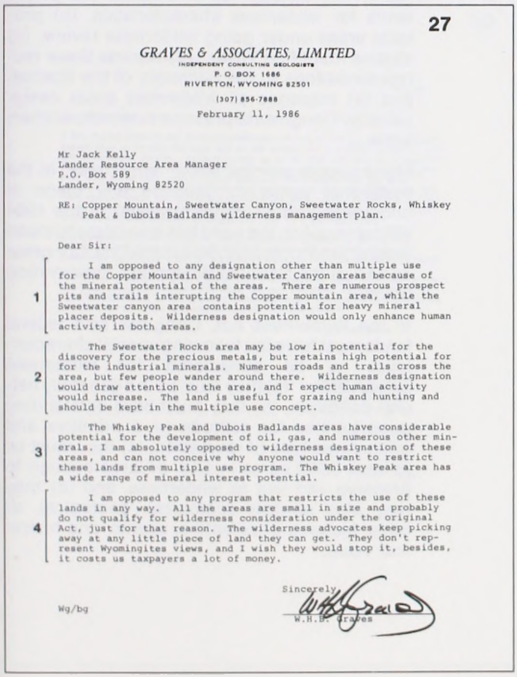
The Wind River Canyon area is another one of my favorite spots in Wyoming. Although there is little left in the way of undisturbed land there, what remains should be preserved. The Copper Mountain area is one such place, and I urge you to give it the fullest protection from development possible. Other areas (see questions below) need Wilderness protection as well -- I urge you to recommend, and promote, such protection.

1 I would appreciate hearing from you. In particular, could you please answer the following questions : 1. How many acres of land does the Wyoming BLM manage ? 2. How many acres are in what parts of the state ? 3. How many of these are in the Lander Resource area ? (If you could send a map showing where the areas are it would be appreciated.) 4. How many acres of land are left in the Sweetwater Canyon, Copper Mountain, Sweetwater Rocks, Whiskey Mountain and Dubois Badlands that might qualify as wilderness ? 5. Are there any other areas that might qualify ? 6. What are the competing interests in these areas that might interfere with Wilderness designation ? 7. Is the BLM under some time schedule or pressure in the matter of Wilderness designation (Rare II ?) ? If so, what are the deadlines, constraints, etc. ?

Sincerely,

Dex Perkins

Dexter Perkins



27

GRAVES & ASSOCIATES, LIMITED
INDEPENDENT CONSULTING GEOLOGISTS
P.O. BOX 1686
RIVERTON, WYOMING 82501
(307) 856-7888

February 11, 1986

Mr Jack Kelly
Lander Resource Area Manager
P.O. Box 589
Lander, Wyoming 82520

RE: Copper Mountain, Sweetwater Canyon, Sweetwater Rocks, Whiskey Peak & Dubois Badlands wilderness management plan.

Dear Sir:

1 I am opposed to any designation other than multiple use for the Copper Mountain and Sweetwater Canyon areas because of the mineral potential of the areas. There are numerous prospect pits and trails interupting the Copper mountain area, while the Sweetwater canyon area contains potential for heavy mineral placer deposits. Wilderness designation would only enhance human activity in both areas.

2 The Sweetwater Rocks area may be low in potential for the discovery for the precious metals, but retains high potential for for the industrial minerals. Numerous roads and trails cross the area, but few people wander around there. Wilderness designation would draw attention to the area, and I expect human activity would increase. The land is useful for grazing and hunting and should be kept in the multiple use concept.

3 The Whiskey Peak and Dubois Badlands areas have considerable potential for the development of oil, gas, and numerous other minerals. I am absolutely opposed to wilderness designation of these areas, and can not conceive why anyone would want to restrict these lands from multiple use program. The Whiskey Peak area has a wide range of mineral interest potential.

4 I am opposed to any program that restricts the use of these lands in any way. All the areas are small in size and probably do not qualify for wilderness consideration under the original Act, just for that reason. The wilderness advocates keep picking away at any little piece of land they can get. They don't represent Wyomingites views, and I wish they would stop it, besides, it costs us taxpayers a lot of money.

Sincerely,

W.H. Graves

Wg/bg

Response to Letter 26

1. BLM in Wyoming manages 17.8 million acres of public lands. Most of the public lands are in the western half of the state. The Lander Resource Area administers approximately 2.5 million surface acres and approximately 2.7 million acres of federal mineral estate.

   The Sweetwater Canyon WSA contains 9,056 acres, of which the Proposed Action recommends 5,760 acres for wilderness designation. The Copper Mountain WSA contains 6,858 acres, and the Sweetwater Rocks group, 32,575 acres in the four units. The total acreage involved in the six WSAs addressed in this plan is 48,489. The two study areas that will be analyzed in 1988 are Dubois Badlands (4,520 acres) and Whiskey Mountain (487 acres). There are no other locations in the Lander Resource Area that would qualify for wilderness study.

   Competing interests in the areas are conflicts involving recreation and wildlife interests with mineral interests, private landowner concerns, and access.

   The BLM is required to report to Congress on the study areas by 1991.

Responses to Letter 27

1. The Proposed Action for the Copper Mountain WSA is a preliminary recommendation for continuation of multiple-use management. As directed by the Secretary of the Interior, the WSA will remain closed to oil and gas leasing until Congress makes the final decision, but it will be open to mineral entry under the General Mining Law. The BLM determined the Copper Mountain WSA to be a roadless island of 5,000 acres or more of public land during the initial WSA inventory. As such, the WSA is not interrupted by numerous prospecting pits and trails, as you have indicated. Minerals prospecting and diggings have occurred outside the WSA and are common throughout the general Copper Mountain area to the east.

   The Proposed Action for the Sweetwater Canyon WSA is to recommend partial wilderness. Lands within the WSA that are encumbered with older mining claims were excluded when the lands for further study were selected. Further mineral potential studies will be conducted by the U.S. Bureau of Mines and the Geological Survey on the lands within the WSA. The results of their studies will be presented to Congress, which makes the final wilderness decision. The

mineral evaluations of the Copper Mountain and Sweetwater Canyon WSAs are correct to the best of our knowledge and could not be changed without new field studies.

2. The Proposed Action for the four Sweetwater Rocks WSAs is a recommendation for continuation of present multiple-use management. However, the four WSAs will remain closed to mineral leasing but open to mineral entry pending a decision by Congress. The potential of these WSAs for locatable minerals can continue to be evaluated by interested individuals. Exploration and mining operations would be permissible so long as wilderness suitability is not impaired.

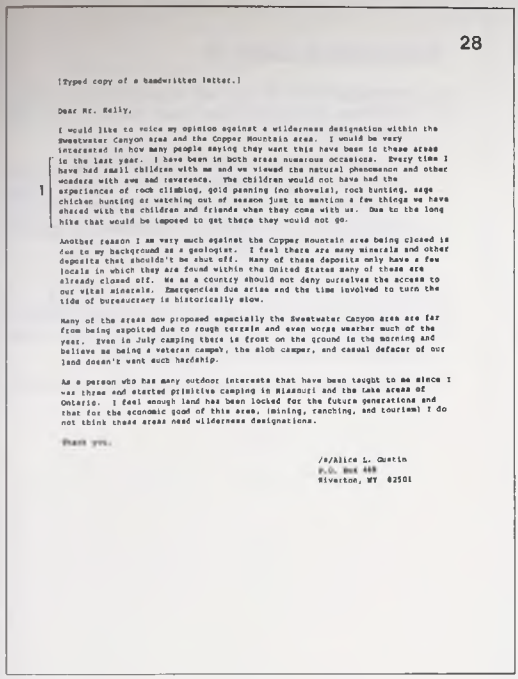
3. Both the Whiskey Mountain and Dubois Badlands WSAs will be studied for wilderness suitability, including the mineral potential. An EIS will be published in 1989.

4. Although the wilderness authority in FLPMA is critical to the BLM's wilderness review effort, the Wilderness Act identifies the criteria for evaluating public lands for wilderness and gives direction on how designated wilderness will be managed. FLPMA sets deadlines for reporting wilderness recommendations, requires studies to be conducted, and specifies how the lands under wilderness review will be managed.

   To fulfill these requirements, the BLM basically performs five functions in the wilderness program. The agency (a) inventories the public lands for wilderness characteristics, (b) protects areas under going wilderness review, (c) studies identified WSAs, (d) reports these recommendations to the Secretary of the Interior, and (e) manages all wilderness areas designated by Congress to preserve their natural character.

   Many people use the word "wilderness" in the traditional sense to describe any piece of undeveloped land. Since passage of the 1964 Wilderness Act, the word has also come to mean federal land officially designated by Congress as part of the National Wilderness Preservation System.

   In the Wilderness Act, Congress said federal lands must have the following special characteristics to be considered for wilderness preservation: (a) they must be in a generally natural condition, (b) they must have outstanding opportunities for solitude or a primitive and unconfined type of recreation, (c) they must be at least 5,000 acres in size, or large enough to preserve and use as wilderness, and (d) they may also contain ecological, geological, or other features of scientific, scenic, and historical value.



28

[Typed copy of a handwritten letter.]

Dear Mr. Kelly,

I would like to voice my opinion against a wilderness designation within the Sweetwater Canyon area and the Copper Mountain area. I would be very interested in how many people saying they want this have been to these areas in the last year. I have been in both areas numerous occasions. Every time I have had small children with me and we viewed the natural phenomenon and other wonders with awe and reverence. The children would not have had the
1 experiences of rock climbing, gold panning (no shovels), rock hunting, sage chicken hunting or watching out of season just to mention a few things we have shared with the children and friends when they come with us. Due to the long hike that would be imposed to get there they would not go.

Another reason I am very much against the Copper Mountain area being closed is due to my background as a geologist. I feel there are many minerals and other deposits that shouldn't be shut off. Many of these deposits only have a few locals in which they are found within the United States many of these are already closed off. We as a country should not deny ourselves the access to our vital minerals. Emergencies due arise and the time involved to turn the tide of bureaucracy is historically slow.

Many of the areas now proposed especially the Sweetwater Canyon area are far from being exploited due to rough terrain and even worse weather much of the year. Even in July camping there is frost on the ground in the morning and believe as being a veteran camper, the slob camper, and casual defacer of our land doesn't want such hardship.

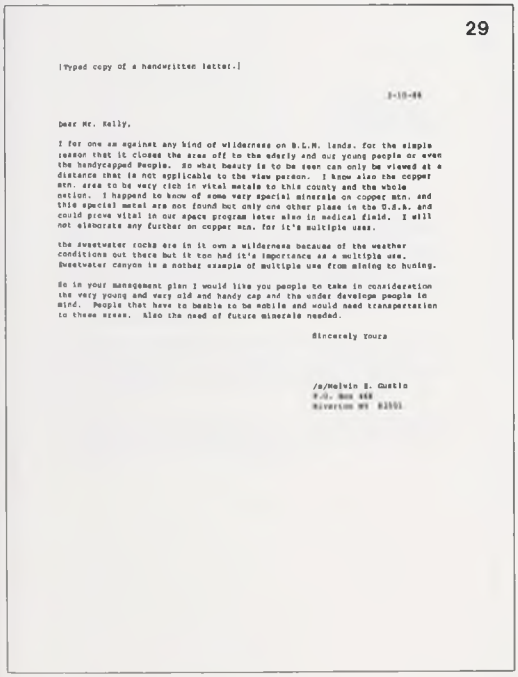
As a person who has many outdoor interests that have been taught to me since I was three and started primitive camping in Missouri and the lake areas of Ontario. I feel enough land has been locked for the future generations and that for the economic good of this area, limining, ranching, and tourism I do not think these areas need wilderness designations.

Thank you.

/s/Alice L. Curtin
P.O. Box 448
Riverton, WY 82501

Response to Letter 28

1. Wilderness designation has not been proposed for the Copper Mountain WSA. Wilderness designation of the Sweetwater Canyon WSA would not impose significant access restrictions. Partial wilderness designation of Sweetwater Canyon would have very little impact on access because (a) river access would still be available at Chimney Creek and Wilson Bar, and (b) closure of the Strawberry Creek access route would still allow motor vehicle use to within ¼ mile of the river at this point. The activities you appreciate so much—sightseeing, rock climbing, rock hunting, hiking, and sage grouse hunting and observation—would not be curtailed by partial wilderness designation; instead, they would be allowed to continue and would be enhanced in some cases.



29

[Typed copy of a handwritten letter.]

3-10-84

Dear Mr. Kelly,

I for one am against any kind of wilderness on B.L.M. lands. for the simple reason that it closes the area off to the aderly and our young people or even the handycapped People. So what beauty is to be seen can only be viewed at a distance that is not applicable to the view person. I know also the copper mtn. area to be very rich in vital metals to this county and the whole nation. I happend to know of some very special minerals on copper mtn. and this special metal are not found but only one other plase in the U.S.A. and could prove vital in our space program later also in medical field. I will not elaborate any further on copper mtn. for it's multiple uses.

the Sweetwater rocks are in it own a wilderness because of the weather conditions out there but it too had it's importance as a multiple use. Sweetwater canyon is a nother example of multiple use from mining to huning.

So in your management plan I would like you people to take in consideration the very young and very old and handy cap and the under developm people in mind. People that have to beable to be mobile and would need transportation to these areas. Also the need of future minerals needed.

Sincerely yours

/s/Melvin E. Curtin
P.O. Box 448
Riverton WY 82501

Response to Letter 29

Thank you for your comments.

30

[Typed copy of a handwritten letter.]

2030 S. Walnut
Casper WY 82601
Feb. 9, 1986

Mr. Jack Kelly, Area Manager
Lander Resource Area
P.O. Box 589
Lander WY 82520

Dear Mr. Kelly:

I am writing in regard to your Draft Resource Management Plan/EIS and Wilderness Supplement for the WSA's in the Lander Resource Area.

1 I am in favor of designating all of these WSAs as Wilderness Areas. All of them, as you state, have exceptional wilderness values, outstanding opportunities for solitude and primitive recreation, and many special features. All of them, according to your Draft, would be manageable as wilderness. I am disappointed, therefore, that you did not recommend all of them for wilderness designation.

2 Your main concerns, apparently, are the effects of wilderness designation on mineral development and on the livestock industry. Oil and gas potential in Sweetwater Canyon and the Sweetwater Rocks has been rated as low to none, and the USGS rated potential in Copper Mountain as low. None of the areas have pre-FLPMA oil and gas leases, so that is not a conflict. The potential for development of other minerals is low in all the areas. Therefore, I don't think that concerns about designation of these areas as wilderness adversely affecting mineral development are valid. Even if there is some conflict, these areas total only 1.9% of the land managed by the Lander RA, and they are the best candidates for inclusion in the National Wilderness System from that part of the state. They would be excellent additions to the System. Sweetwater Canyon and Sweetwater Rocks contain three ecosystem types not yet represented in the Wilderness System. None of these areas should be excluded because of slight potential conflicts.

3 The same goes for the effects of designation on the livestock industry. According to your draft, grazing would remain basically the same, and any vehicle restrictions would have little effect on management. Some private landowners near Sweetwater Rocks object to having a wilderness areas bordering their ranches, and this appears to be the major, if not only, reason for your failure to recommend this complex for wilderness designation. That kind of logic is outrageous--that is, after all, public land. It is our job to act in the public interest, not in the interest of a few individuals.

4 You are concerned that vehicle restrictions would limit recreation use. Copper Mountain is unroaded, and there is only a total of 3 miles of tracks in each of the other two areas. Access by foot is easy and can be accomplished on public land.

5 You also raised the question of overuse due to wilderness designation. This has not occurred in National Forest Wilderness Areas in Wyoming, and is a very weak argument for your dismal wilderness recommendation.

Although I have not been to the Copper Mountain WSA, I know it is important as deer and antelope winter range, and includes steep canyons and spectacular views.

I have hiked, camped, and fished in Sweetwater Canyon. This canyon is a refreshing oasis in the plains, important for birds and other critters, including elk and moose. It is a quiet and peaceful place, and I would hate to ever see it developed in any way.

I have also hiked and camped in the Sweetwater Rocks. It's a very intriguing place, with the huge granite domes popping up out of the sagebrush. I could happily spend weeks exploring the Rocks. They are a haven for wildlife--one of the biggest thrills and surprises I've had was seeing 6 or 8 bighorn sheep on the flanks of one of the domes.

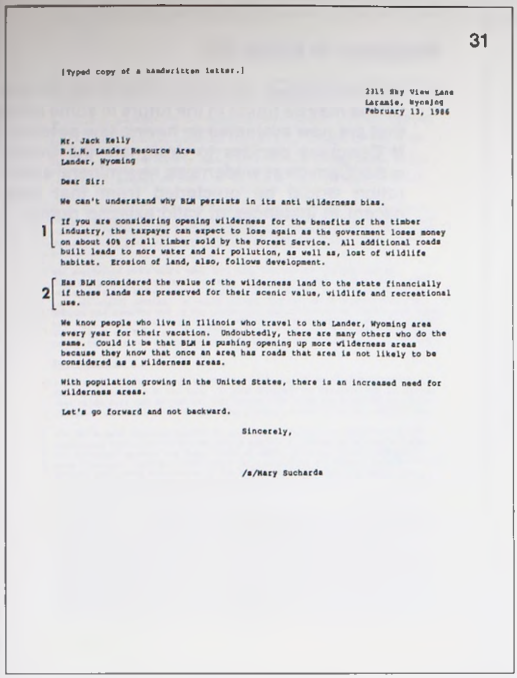
I strongly believe that all three of these WSA's, a total of 48,089 areas, should be designated Wilderness Areas. The conflicts with other uses are slight, but the uniqueness and diversity they would bring to the Wilderness System are great. They are wonderful examples of Wyoming, and we should be proud to preserve them.

Sincerely, from a native,

/s/Martie Crone

Responses to Letter 30

1. Manageability is not an environmental issue, and the discussion has been deleted from the final EIS.
2. On the basis of analysis done in the Lander Resource Area RMP/EIS (USDI, BLM 1985b), we believe that the Copper Mountain WSA is more accurately rated as moderate to high for oil and gas potential.
3. See response 3 to letter 17.
4. Vehicle restrictions would limit certain types of recreation use. The magnitude of this is discussed in chapter 4 for each WSA.
5. This discussion has been deleted in the final EIS.



31

[Typed copy of a handwritten letter.]

2315 Sky View Lane
Laramie, Wyoming
February 13, 1986

Mr. Jack Kelly
B.L.M. Lander Resource Area
Lander, Wyoming

Dear Sir:

We can't understand why BLM persists in its anti wilderness bias.

1 If you are considering opening wilderness for the benefits of the timber industry, the taxpayer can expect to lose again as the government loses money on about 40% of all timber sold by the Forest Service. All additional roads built leads to more water and air pollution, as well as, lost of wildlife habitat. Erosion of land, also, follows development.

2 Has BLM considered the value of the wilderness land to the state financially if these lands are preserved for their scenic value, wildlife and recreational use.

We know people who live in Illinois who travel to the Lander, Wyoming area every year for their vacation. Undoubtedly, there are many others who do the same. Could it be that BLM is pushing opening up more wilderness areas because they know that once an area has roads that area is not likely to be considered as a wilderness areas.

With population growing in the United States, there is an increased need for wilderness areas.

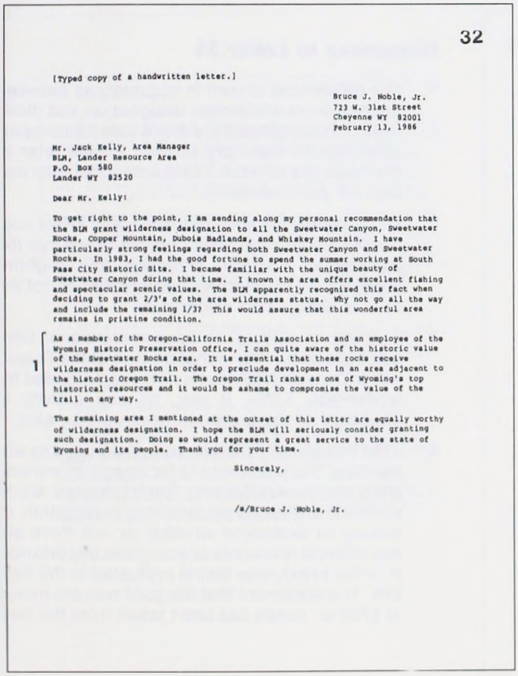
Let's go forward and not backward.

Sincerely,

/s/Mary Sucharda

Responses to Letter 31

1. No commercial timber resources have been identified in the WSAs. Consequently, sale of timber was not considered in the decisions affecting the proposed wilderness areas.
2. We have considered the value of wilderness areas to the state of Wyoming and the general economy. Please refer to the socioeconomic analysis in the Lander RMP/EIS (USDI, BLM, 1985b).



32

[Typed copy of a handwritten letter.]

Bruce J. Noble, Jr.
723 W. 31st Street
Cheyenne WY 82001
February 13, 1986

Mr. Jack Kelly, Area Manager
BLM, Lander Resource Area
P.O. Box 580
Lander WY 82520

Dear Mr. Kelly:

To get right to the point, I am sending along my personal recommendation that the BLM grant wilderness designation to all the Sweetwater Canyon, Sweetwater Rocks, Copper Mountain, Dubois Badlands, and Whiskey Mountain. I have particularly strong feelings regarding both Sweetwater Canyon and Sweetwater Rocks. In 1983, I had the good fortune to spend the summer working at South Pass City Historic Site. I became familiar with the unique beauty of Sweetwater Canyon during that time. I known the area offers excellent fishing and spectacular scenic values. The BLM apparently recognized this fact when deciding to grant 2/3's of the area wilderness status. Why not go all the way and include the remaining 1/3? This would assure that this wonderful area remains in pristine condition.

1 As a member of the Oregon-California Trails Association and an employee of the Wyoming Historic Preservation Office, I can quite aware of the historic value of the Sweetwater Rocks area. It is essential that these rocks receive wilderness designation in order tp preclude development in an area adjacent to the historic Oregon Trail. The Oregon Trail ranks as one of Wyoming's top historical resources and it would be ashame to compromise the value of the trail on any way.

The remaining area I mentioned at the outset of this letter are equally worthy of wilderness designation. I hope the BLM will seriously consider granting such designation. Doing so would represent a great service to the state of Wyoming and its people. Thank you for your time.

Sincerely,

/s/Bruce J. Noble, Jr.

Response to Letter 32

1. As outlined in the Lander RMP/EIS, the Oregon/Mormon Pioneer Trail protective corridor covers ¼ mile on each side of the trail, or visible horizon, whichever is closer. The BLM has determined this to be a sufficient corridor to protect trail values. Management recommendations outside of this corridor (such as the Sweetwater Rocks WSA wilderness suitability) may take into account effects on the trail, but these effects must be weighed against other values and uses. Outside the corridor, an effect on trail settings is just one of many considerations to be considered for land-use recommendations.

33

Donald A. Smith
519 College View Drive
Riverton, WY 82501

February 12, 1986,

Mr. Jack Kelley
Manager Lander Resource Area
Bureau of Land Management
Lander, Wyoming 82520

Dear Mr. Kelley:

Firstly, I want to complement you on your Lander Area Resource Management Plan. By and large it appears to be middle of the road, and exhibits some degree of balance. Further, I wish to thank the Bureau for the opportunity to comment on this plan.

I do, however, find fault with the Lander Resource Area's recommendation for partial wilderness of the Sweetwater Canyon Area, WSA-WYO-30-101.

I feel that any area which is truly wilderness, and contains no economic value, will remain so. No prudent person will expend capital, time, and energy to access these areas without promise of capital return.

1 While many of these areas contain no PRESENTLY KNOW mineral potential; the present state of knowledge precludes assuming that none will EVER be found.

With 8.79% of our state already locked up in Congressionally Designated wilderness and National Park, most of the latter which is ADMINISTRATIVELY endorsed wilderness; I do not feel that the citizens of this state should be burdened with ANY additional wilderness!

Very truly yours,

Donald A. Smith

Response to Letter 33

1. You are correct, of course, that more mineral values may be found in the future in some areas that are now evaluated as having low potential. If Congress decides to designate the Sweetwater Canyon as wilderness, new mineral exploration would be precluded from that area, except in instances of valid existing rights.

34

[Typed copy of a handwritten letter.]

January 13, 1986

Box 831
Lander, Wyoming 82520

Mr. Jack Kelly
Area Manager
Lander Resource Area
Lander, Wyoming 82520

Dear Mr. Kelly:

I protest the BLM's recommendations for only Partial Wilderness Designation for the Sweetwater Canyon WSA, and Nonwilderness Designations for the Sweetwater Rocks WSA's and the Copper Mountain WSA. I feel that all six areas offer outstanding opportunities for primitive recreation; to experience the solitude, naturalness and scenic beauty of Wyoming's high desert environment. In addition to extremely high wildlife values identified for these WSA's, they also exhibit outstanding and unique geologic and historic qualities. Wyoming's high plains desert ecosystems are poorly represented in the National Wilderness Preservation System. Wilderness designation of the six WSA's would thus expand the System's diversity and ensure future generations enjoyment of our shrinking wild resources. Too little land in Wyoming has been withdrawn from commercial, mining, and energy development. We, the public need additional wilderness to ensure that a balance is kept between land conservation/preservation and land development.

Sweetwater Rocks WSA's

It appears that the BLM's primary reasons for the proposed nonwilderness designation are fivefold:

1. A large amount of surrounding private lands.

2. Nuisance of recreation to local landowners who don't wish to have a wilderness area in their "backyard."

3. Motorized herding of livestock and maintenance of range improvements would be affected.

4. Motorized recreation would be restricted.

5. Potential for adverse impacts on the mineral and energy industries.

1 These perceptions are not supported by the BLM's analysis. The draft EIS found only slight impacts would occur in these five areas as a result of wilderness designation. Your studies found that wilderness designation does not cause a significant increase in visitor use of an area for recreation. Therefore it is unlikely that wilderness would create additional problems for ranchers/landowners. In addition, you determined that problems that might stem from increased use such as litter and vandalism would most likely occur whether or not the area were designated as wilderness. In conclusion you

Responses to Letter 34

1. The differences shown in our analysis between impacts from wilderness designation and those from nondesignation are slight (see the comparative impact summary tables). Please refer to the response to letter 17 for additional information on your concerns.

2. The potential for activities that could affect successful reintroduction of bighorn sheep into the Sweetwater Rocks is extremely low. Bighorn sheep could be reintroduced whether or not the area is designated wilderness.

3. It would be difficult to keep recreational ORV use from occurring in that portion of the Sweetwater Canyon WSA that is not recommended for wilderness. Little, if any, mineral activity is expected in the nonwilderness portion also.

4. If the Sweetwater Canyon was designated as wilderness, the lands would be closed to mineral entry and mineral leasing. Such a closure would preclude any future prospecting, exploration, or mining to determine whether or not there are any mineral resources of economic importance. It is this preclusion that is evaluated in the final EIS. The statement that the gold was not mined at $700 an ounce has been taken from the final

determined that Wilderness Designation would have only slight impacts on the life-style of local landowners. And the nuisance feared by these ranchers from increased use and trespass would be insignificant.

As stated in the draft EIS the Sweetwater Rocks WSA's are virtually roadless. There are approximately 7 segments of two tracks averaging only 1/2 mile each. Present livestock operations involve little vehicular use inside the WSA's. Wilderness Designation, you admit, would have little effect and livestock operations would be conducted in virtually the same manner as they are today. Admittedly closure of these roads would impact vehicular recreation. However, the impact of the loss of 7-1/2 mile segments of road would be very slight and have little effect on recreation.

As to the potential for adverse impacts on the mineral and energy industries. It appears this would be extremely slight. The draft EIS clearly states that the potential for mining hardrock minerals and recovery of oil and gas in the WSA's is low. Wilderness Designation would thus have little effect on these industries.

The Sweetwater Rocks WSA's have very high natural and wildland values. Wilderness designation would preserve for all the public an area with unique geologic features that provide high quality primitive recreation and solitude in a non-alpine setting. It would prevent degradation of current wildlife habitat and possibly aid in the successful reintroduction of the bighorn sheep to a portion of its historic range. Wilderness Designation would also retain the natural character and historical setting of an area associated with some of the best preserved segments of the Oregon/Mormon Pioneer trail in the West.

2

Sweetwater Canyon WSA

I favor full Wilderness Designation for this WSA rather than the Partial Wilderness proposed by the BLM. In your analysis in the Draft EIS it appears that Wilderness Designation for the entire 9056 acres would result in only a slightly higher degree of impact than already caused by Partial Designation.

The BLM's main concerns appears to be--that wilderness designation for the additional 4000 acres of the WSA would result in hardship and inconvenience for livestock herders and other users of motor vehicles through additional road closures. Secondly there would be a potential for adverse impacts on the mineral and energy industries if the additional lands were withdrawn from research and development. In my opinion neither of these are valid concerns as they are not supported by your own analysis.

3

Designation of Wilderness for any part or parts of the WSA would result in road closures. The BLM is already recommending partial wilderness designation for 5760 acres of the WSA. You have determined that the impact of road closures there would be slight. You conclude herding livestock would be more time consuming but there would be little effect on livestock management. Ranchers currently use horseback as a common method of herding cattle in the WSA. Horseback could essentially be used just as easily in the full 9056 acres of Wilderness as in the Partial Wilderness. Thus Wilderness Designation of the entire WSA would not alter herding methods to a significant degree. In addition, the road to Strawberry Creek, apparently the rancher's most critical access, would be closed under either Wilderness proposal. Similarly, access

closures would result in only slight impacts on other motor vehicle users in the WSA. As they would be equally inconvenienced under the Full Wilderness as the Partial Wilderness.

The BLM's second objection to Full Wilderness designation for the Sweetwater Canyon WSA occurs in the area of mining. You state that the mining and energy industries would be adversely impacted if the additional 4000 acres of the WSA were withdrawn from leasing. This is not supported by your own analysis. The draft EIS states that there is a moderate potential for gold, but in such small amounts that it was economically unfeasible to recover even when the price of gold was $700.00 per ounce. The WSA has no potential for oil and gas. There are no commercial quantities of valuable minerals & though the area were surveyed for uranium deposits none were found in or near the WSA.

4

The Sweetwater Canyon WSA has very high historic values associated with some of the best preserved segments of the Oregon/Mormon Pioneer Trail in the West. The Draft EIS states that the Partial Wilderness Proposal will ensure protection of the trail by closing it to vehicular traffic and not allowing disturbance of its surface by man. I disagree with this assertion. The trail corridor lies well outside the northern boundary of the 5760 acres proposed as wilderness. The protection of the Oregon/Mormon Pioneer Trail that you advocate can only be ensured if the entire 9056 acres of the WSA are designated as Wilderness. And even under the latter proposal only portions of the trail will be protected.

5

The same qualities that make the Sweetwater Rocks WSA's eligible for inclusion in the NWPS are present in the entire Sweetwater Canyon WSA. In addition the canyon offers fantastic scenery. The Sweetwater River here is free flowing and has excellent wildlife values and water quality. The river also offers high quality brown and rainbow trout fishing; and the Wyoming Game and Fish Department has classified it as an important trout water of regional significance.

I encourage the Lander Resource Area & the BLM to rethink the proposed land management actions outlined in the Wilderness Draft EIS. Wilderness designation for the Sweetwater Rocks WSA's, the Copper Mountain WSA, and the entire 9056 acres of the Sweetwater Canyon WSA is critical for Wyoming's future. Ranching, mining, and energy interests represent only a very small segment of the American public. Yet they wield an amount of control over federal land management policy well beyond their numbers. Their anti-wilderness bias is very clear and seems to be weighed more heavily by federal agencies in policy decisions than the interests of other sectors of the public. Wilderness is a public decision to be made by all of the public, not just a few special interests. Thank you for your consideration of these comments. I wait to hear from you. Please Respond.

Sincerely,

/s/Sharon E. Dooley

EIS. In addition, the final EIS has been revised to show that little mining activity would take place in the nonwilderness portion of the WSA.

5. Your observation on the Oregon/Mormon Pioneer Trail being outside the Sweetwater Canyon Partial Wilderness boundary is valid. Effects on cultural resources are not analyzed in the final EIS for reasons explained in chapter 1.

35

February 14,1986

Mr. Jack Kelley
Lander Resource Area Manager
Bureau of Land Management
Lander, WY 82520

Dear Mr. Kelley:

I would like to commend you on the Draft Resource Management Plan/ Environmental Impact Statement for the Lander Resource Area. I agree with the Bureau's recommendations and findings with the possible exception of the proposed partial wilderness designation in the Sweetwater Canyon WSA.

1 More specifically, isn't the area already protected sufficiently under the present management format? As I see it the Oregon Trail and Mormon Trail areas are presently protected from any unnecessary intrusion by its protective corridor status. Furthermore, any mining activity in the area would have to file notices with the BLM and the State Department of Environmental Quality and resource values would be addressed and protected at that place in time. It also appears that ORV use, fish, wildlife, grazing and cultural resources are adequately protected under the current system. With all of these safeguards already in place, why do we need to establish another wilderness area?

As you are well aware, the people of Wyoming need to keep and create jobs as well maintain the high quality of life to ensure the state's future. Wherever possible lets keep the public lands open.

Keep up the good work!

Sincerely,

Rob Kindle
255 Cathedral Dr.
Riverton, WY 82501

Response to Letter 35

1. Present management would not ensure protection of all wilderness values, only that unnecessary and undue degradation would be prohibited. Existing primitive recreational opportunities could be displaced by mining or future water developments. Opportunities for solitude could be adversely impacted by development. The protective corridor for the Oregon/Mormon Pioneer Trail applies only to ¼ mile either side of the trail and does not include the river or the canyon itself.

36

[This letter has been retyped for better readability.]

Thursday, February 13, 1986

Dear Mr. Kelly,

I am presently a student here at the University. However, I have lived in Fremont County 25 of my 34 years and feel close to resource issues there. It has come to my attention that the B.L.M. is winding up its public comment period relative to Wilderness recommendations for certain lands in the Lander Resource Area. As many others feel I feel also that the designation of "Wilderness" can sometimes spell doom for a small fragile pristine area. Overuse and abuse by wilderness seekers is a problem. For this reason I feel that Wilderness designation might be harmful in the Sweetwater Canyon and Copper Mountain areas.

1 Three other areas, however, would truly see better management as Wilderness. Whiskey mountain is already well established as an outdoor recreation site. The sheep herd is world famous and the area is bounded by highly popular hunting, fishing and hiking tracts. On its own merits and the fact that it is part of a high use area, such activities as oil and gas leasing are highly inappropriate. Wilderness designation appears to be the best resource protection.

2 Sweetwater Rocks and the Dubois Badlands are two other areas which should be Wilderness. Opportunities for non-motorized recreation are good in both areas. They are unique and present little conflict with ranching and mining activities. The potential for overuse seems limited.

Generally, the solution for overuse in our recreation areas seems to me to make more such areas and encourage the public to seek out the less used districts. I think the B.L.M. owes it to the people of Wyoming to show that it is responsive to their long-range interests for a balance of Wilderness and open development resource strategies. The view of the B.L.M. as the puppet of the mining and ranching interests in the West can be dispelled by the designation of only 2 or 3 percent of B.L.M. lands in the state as Wilderness. The day I see the East side of Whiskey Mountain carved up to provide access and platforms for drilling operations would leave no doubt in my mind. The problems of oil and mineral industries have little to do with lack of access to resources in the state. In the Gillette area with lots of oil and easy low-risk drilling, companies are going broke every day. You have the opportunity to show that B.L.M. is pursuing multiple use including recreation.

Thanks,

/s/Jim Minick
Box 3821
Laramie, Wyoming 82071

Responses to Letter 36

1. The Whiskey Mountain WSA is being studied under a separate document.
2. The Dubois Badlands WSA is being studied under a separate document.

37

Star C, Inc.
Dumbell Ranch
Alcova, WY 82620
February, 1986

Mr. Jack Kelly
Resource Area Manager
Bureau of Land Management
P.O. Box 589
Lander, WY 82520

Dear Mr. Kelly:

We are relieved that the Lander Resource Area Bureau of Land Management has recommended that the Sweetwater Rocks not be designated as a wilderness area.

As you know, we have lived and ranched along and in a portion of the Sweetwater Rocks for many years. We are well aware, first-hand, of the intricacies of these Rocks, and of the numerous problems which could arise if they were, indeed, designated as Wilderness.

Our formal statements, which address, step-by-step, the criteria regarding wilderness determinations are on file in your Lander Bureau of Land Management office. Our position remains the same as it was at the time we wrote the formal statements.

We are increasingly amazed to read and hear of out-of-state "environmental" groups who repeatedly want to control the use and status of Wyoming's government-owned lands. It is a foregone conclusion that many of those individuals have never seen, and may never see, any of the lands they want to manipulate. They cannot possibly understand the complexities, individual peculiarities, and variances of Wyoming's lands--public or private.

We certainly would not be so presumptuous as to try to maneuver the use of public lands in states other than Wyoming, nor to try to interfere in lands or cities in non-public-land states!

Sincerely,

Norman Park and
Gaynell Park

Response to Letter 37

Thank you for you comments.

38

[This letter has been retyped for better readability.]

January 20, 1987

Jack Kelly
Area Manager
BLM
Box 589
Lander, WY 82520

Dear Sir,

Please accept this comment on the Lander Resource Management Plan as part of the official record.

I must begin by saying that I am greatly disturbed by the tone and direction the plan takes for its next 10 years of management. Despite much discussion and sentiment from the public indicating the need to preserve rather than exploit our federal lands, the BLM has almost unanimously voted to market every available resource on the public lands it manages, even at a loss if necessary.

I am particularly opposed to leasing with NSO stipulations the critical wildlife habitat area of Whiskey Mountain and the East Fork Elk Winter Range. The BLM admits themselves in the plan that such action will threaten the future health and well-being of the sheep and elk, and yet the recommendation is still made to lease the area. This can only be a state mandate, for I cannot imagine anyone who works in the Lander District being so short-sighted as to jeopardize the largest bighorn sheep herd in the U.S. and one of the best winter ranges for Yellowstone elk for the meager possibility of a little low grade, high sulfur crude oil in an area of such low mineral potential. I strongly urge you to withdraw all leasing for oil and gas as well as locatable minerals from areas of critical wildlife habitat and winter range.

While on the subject of Wildlife, it has come to my attention while out in the hills surrounding Dubois that severe overgrazing has taken place over the years and is not being corrected. In particular, the lands behind the Dubois badlands north of the Wind River and west of the East Fork are in very poor condition. It has little vegetation, erosion has been a real problem that is not likely to be corrected until the grasses are allowed to recover the ground. I would suggest that grazing leases in areas like this be reduced substantially in order to let the grasses regenerate. Also of concern to me are the areas south of the Wind River below the forest boundary and above the private landowners boundaries, between Arrow Mountain and the Wind River Indian Reservation. Again, the livestock using these lands should be reduced indefinitely until the vegetation can recuperate. To accomplish this the BLM needs to do more than just put an allotment in category C or M that would maintain their present state when a larger portion of the allotment is in the poor or fair condition than in the good to excellent condition. It certainly seems as though some management coordination is in order between the BLM and the Soil Conservation Service.

Responses to Letter 38

1. Our analysis in the final EIS shows that visitation would probably not increase significantly because of wilderness designation.
2. The Dubois Badlands WSA is being studied under a separate document.

I am disappointed that the plan only recommended part of one WSA for wilderness. The BLM is showing its true colors here by staying with a commodity orientation in its management plan. The excuses for not making the Copper Mountain and Sweetwater Rocks WSAs wilderness areas are ridiculous. If wilderness is in so much demand among the public, it isn't logical that the federal land management agencies designate less wilderness acreage. Yet that is what the BLM is suggesting by saying that there will be increased use of an area so designated. I suggest to the BLM that the whole of Sweetwater Canyon, as well as Copper Mountain and Sweetwater Rocks and the Dubois Badlands be made wilderness areas. Considering the millions of acres the BLM manages, this small amount would be a welcome addition to the National Wilderness System. Also, I recommend that ORV use is prohibited in these areas, since they are areas of sensitive beauty and highly erodable. There are many areas where ORV use is acceptable and more appropriate that in these WSAs. 1 2

I hope the BLM takes the job of stewardship of our public lands more seriously in the next 10 years than they have in the past and consider the possibility that these resources are expandable or conservable as you choose. Let's choose in the common interest of the general public rather than the corporate interest of a few.

I look forward to seeing the final Lander Resource Management Plan and hope it is improved over the presently poor draft.

Sincerely,

/s/Meredith Taylor
Spring Ranch RR 31
Dubois, WY 82515

39

FORTY-SECOND FLOOR
1801 CALIFORNIA STREET
DENVER, COLORADO 80202

November 29, 1985

Mr. Jack Kelly
Lander Resource Area Manager
P.O. Box 589
Lander, Wyoming 82520

Dear Mr. Kelly,

Thank you for responding to my request for a copy of the Draft Resource Management Plan. I appreciate this opportunity to comment on its contents.

The Resource Management Plan and the Draft Environmental Impact Statement are seriously flawed, and major changes must be made before they will meet the standards demanded by statute, by sound policy, and by simple common sense. Unfortunately, I have insufficient time to discuss many of the important issues in detail, but the most crucial problems with the Plan are so fundamental they can be stated without lengthy discussion.

1. The Plan Should Consider an Alternative Which Would Reduce Development of the Resource Area.

NEPA and BLM regulations require consideration of a spectrum of alternatives. The purposes of NEPA are frustrated when consideration of alternatives is unreasonably constricted. Greene County Planning Board v. Federal Power Commission, 559 F.2d 1227 (2d Cir. 1976), cert. denied, 434 U.S. 1086. "All reasonable" alternatives must be considered even if they do not offer a complete solution to the problem. National Resources Defense Council, Inc. v. Administrator, Energy Research and Development Administration, 451 F.Supp. 1245 (D.C.D.C. 1978). The duty to develop and

1

Response to Letter 39

1. The wilderness study criteria are used in the analysis of the management actions of each alternative. Public comment is one of the required quality standards. The criteria address a wide variety of interests and concerns and are not necessarily the same as the concerns expressed in the scoping process.

2. A wilderness EIS analyzes the impacts to certain resources in an area if an area was designated wilderness or if it was not. The scoping process itself identifies for the agency and the public those issues regarding what changes may occur with or without designation that need to be addressed in an EIS. The issues identified for analysis in an EIS are not always part of the rationale for the proposed action. Further, an EIS basically answers two questions: "What do you plan to do?" and "What are the impacts of doing so?" In a wilderness EIS, the rationale for the proposed action is necessarily absent. The rationale is detailed, however, in the wilderness Study Report presented to Congress by the Secretary of Interior through the President.

thoroughly consider alternatives to proposed actions requires substantive, good-faith consideration of alternatives to the fullest extent possible, a very high standard. Libby Rod & Gun Club v. Poteat, 457 F. Supp. 1177, aff'd in part, reversed in part on other grounds, 594 F.2d 742.

While four alternatives are discussed in the Draft Resource Management Plan (DRMP), the alternatives in no way represent a spectrum of choices. Instead the alternatives are mere variations on a single development strategy, and the choices considered were unreasonably constricted. Every Alternative considered would result in further development of the Lander Resource Area; no Alternative consistently considers reducing or restricting development. The Alternatives selected give the appearance of compliance with statutory mandates while leaving the substantive choices undiscussed and unscrutinized.

2. The Process Used to Identify Issues and Develop Planning Criteria Was Seriously Flawed. The Criteria Do Not Reflect Consideration of the Public Interest.

The limited range of Alternatives considered is the result of the faulty procedure used to identify issues and develop planning criteria.

The BLM has a statutory mandate to consider the public interest in formulating management policies, not merely the comments of a portion of the public. The BLM has a duty to consider the public interest, even if the comments it received about the Plan reflect only a narrow range of opinion.

In developing the Lander DRMP, the BLM considered only the desires of a very limited segment of the public, a segment whose self-interest is closely tied to the BLM's Lander Resource Area development policies. The greatest public input about the proposed plan came from interests in the immediate vicinity of the Lander Resource Area. The agency did not seriously solicit the views of interests outside this small area.

This is clear from the issues ultimately identified. Grazing rights, oil and gas development, commercial timber rights, and the desire of local interests to buy portions of the Resource Area are hardly the issues most

Americans would place high on the list of issues important in the management of the public lands of the United States, yet these are the issues the agency identified as those to be resolved by the RMP.

These issues clearly do not represent the views of the public as a whole and certainly do not reflect the public interest. Yet they serve as the basis for the criteria set by the BLM. By relying on a small, self-interested group, the BLM avoided its statutory duty to consider the public interest. The agency must do more than listen to the desires of local interests. It must base its decisions on what is best for the public as a whole.

1 **3. The Criteria Used To Determine Wilderness Suitability Are A Sham. They Represent Implicit Choices Against Wilderness Designation And Do Not Fairly State The Wilderness Suitability Issue.**

The issue of Wilderness Suitability deserves special treatment because of the absurd manner in which the BLM states this issue. While nearly every American, whether favoring additions to designated wilderness or against further designations, would consider wilderness identification a major concern in the formulation of public land use policies, the manner in which the agency states this issue makes its inclusion in the DRMP a sham.

2 Concerns identified by the agency in its "scoping process" include whether wilderness designation "would adversely affect mineral exploration and development," whether wilderness designation would "adversely affect the livestock industry by reducing or eliminating livestock grazing, limiting motor vehicle access, disrupting traditional use patterns, and increasing visitor use with resultant problems of vandalism, litter and fire," whether "livestock operators could be displaced or be put out of business," and whether "wilderness designation would limit recreational use through eliminating access by motor vehicles."

These criteria have absolutely nothing to do with preserving and

protecting wilderness. They have everything to do with preserving and protecting vested economic interests.

While these criteria may help identify areas of value for grazing, they are completely irrelevant to whether an area is suitable for wilderness designation. Inherent in the choice of these criteria is a definition of wilderness which amounts to "areas undesired by any group seeking economic development."

The Wilderness Act contains a much different definition. See, 16 U.S.C. §§ 1131, et seq. The definition contained in §1131(c) does not mention suitability for mining or for other economic development, unlike the definition inherent in the "issues" used by the BLM in this Plan. It correctly and honestly attempts to define what wilderness is and why wilderness is important.

There is little question that developing a management plan requires the agency to reconcile competing interests. This is the reason a plan is necessary. Nonetheless the agency should not be allowed to escape the difficult choices inherent in this process by defining one interest in terms which are set by a competing interest. The BLM defines wilderness as areas not useful for grazing or mining. Instead of fairly stating the competing interests, the BLM has implicitly decided that mining and grazing interests are superior to wilderness interests and avoided the very choices the Plan is intended to consider.

Most of the remaining concerns identified by the agency during the "scoping process" are relevant to the wilderness issue. Unfortunately, even a brief glance through the DRMP reveals that these concerns received little actual weight during the decision making process.

4. The Alternatives Selected For Discussion Either Do Not Represent Cohesive Strategies, Or The Strategies They Represent Are Not Adequately Explained.

Little needs to said on this point. I am unable to find an explanation of the Alternatives as coherent approaches to the management of Lander Resource Area. Within each Alternative, the choices appear to represent

no comprehensive approach. Instead, alternatives B and C appear to be mere repositories of relatively, randomly selected choices. Similarly the development of the preferred alternative does not represent a reasoned choice based upon policy. The preferred Alternative appears to represent an incoherent series of choices without any single unifying purpose or strategy.

Once again, thank you for this opportunity to comment. I look forward to hearing of your decision in this matter.

Sincerely,

Mark Hughes

40

RECEIVED
FEB 4 1988
LANDS & MINERALS
AREA OFFICE

COMMENTS ON LANDER BLM
RESOURCE MANAGEMENT PLAN DRAFT

Oil and Gas Leasing

The overall theme for management of the oil and gas resources within the resource area to make public lands available for leasing to the maximum extent possible on page 289 will not be beneficial to critical wildlife needs. Many of the areas that would be open to oil and gas leasing serve as important wildlife habitat and harassment or disturbance by humans can only prove detrimental to wildlife.

The Environmental Consequences you mention on pages 189, 190, and 192 portray an accurate analysis of how oil and gas exploration and development stresses, disturbs, and displaces wildlife and how its effects are compounded on critical habitat.

I feel that the No Surface Occupancy Leasing selected as the preferred alternative does not adequately protect the critical habitat in a long term manner.

I suggest that two areas which would be effected greatly by this plan, the Whiskey Basin Bighorn Sheep Winter Range and the East Fork Winter Range should be withdrawn from all oil and gas leasing.

You state that locatable minerals should be withdrawn on these two areas, but not the withdrawl of oil and gas leasing. This is very inconsistant.

Off Road Vehicles (ORV)

Dubois Badlands

I support the preferred alternative to close the entire unit to ORV. It disturbs me to think that there would be little or no enforcement of this abuse if plan is gone ahead with. BLM has difficulty enforcing laws on current land.

Wilderness

1 I support the proposal of having the Dubois Badlands become wilderness. I do not support Whiskey Mountain wilderness proposal.

Man has caused himself to manage habitat properly due to past poor management practices. With wilderness areas now, we cannot manipulate or improve existing conditions. For too long we have suppressed fires, overtimbered and overharvested our resources. By just eliminating these activities, the areas become decandent and less productive. We should have allowed some habitat management practices to continue.

The Badlands are a fragile ecosystem. Off road vehicles have caused damage to them. By becoming a wilderness area, I feel the BLM can better enforce ORV and protect critical Bighorn sheep, antelope, mule deer and elk habitat. This area requires little or no habitat manipulations.

On the other hand the Whiskey Mountain area can properly be managed by burning, fertilization, and reseeding low production areas. If it becomes wilderness, these options can not take place.

Our lands demand proper management and the abuse of them only decreases the resources. Let's identify these lands which are critical to wildlife and protect them.

Submitted by

Joe Brandl
Box 64
Dubois, WY 82513

Response to Letter 40

1. The wilderness study for Whiskey Mountain and Dubois Badlands is being done under a separate document.

41

[This letter has been retyped for better readability.]

Comments on the BLM Resource Management Plan
Gary J. Keimig
Box 945
Dubois, Wyoming 82513

I find the B L M plan a little confusing as there seems to be both conflicting land use planning and because of this I have a hard time trying to find an overall preferred alternatives.

I first of all, feel all crucial wildlife habitats should be withdrawn from oil/gas and mineral leasing. In the event a major oil/gas or mineral find should occur I feel the BLM should spell out the consequences of that discovery and its effects on Wildlife and Recreation. I particularly feel these concerns are of utmost importance in view of the recent findings of the Futures Project which I personaly feel are the most realistic evaluation of Wyoming I have ever heard. As we move into the 21st century the Wildlife and Recreational values of our state are going to become more important both to the economy of our state and the welfare of our nation. The next twenty years will see our country becoming less dependant on fossil fuels as alternative energy sources begin to become a reality. The way we manage our Wildlife resources today will determine the quality of life our state will have to offer tomorrow.

I am definitely opposed to any kind of Oil/Gas leasing or mineral leasing of lands in the Whiskey Mountain and in the East Fork Habitat areas near Dubois. I feel the BLM maybe overemphasizes Oil/Gas and Mineral Leasing and Developing and I have mentioned befor I think all areas under consideration need to be looked at very closely. I question your statement to "Lease to the Maximum extent possible" This statement alone scares me to death, and is a poor overall attitude for professional Land Mangers to take.

In evaluating your fire-controlled-suppression plan. I think each fire should be evaluated. Many positive benefits can result from most fires.

I have spent a great deal of time in The Dubois Badlands and find it to be one of the most intriguing areas I have ever seen. Indiscriminate use of this area by motorcycles, 4-wheel drives, etc. are beginning to show their mark. This is a very fragile area and cannot handle abuse. I have talked with both ranchers in the area and Game & Fish people who all agree the area would best be managed as a Wilderness area. There is not enough grazing to support a ranching operation, and it has become an important Wildlife use area. It now supports a thriving Bighorn Sheep population, Deer and is being utilized by Moose. During more severe winters the area is increasingly being used by Elk as winter range. In view of these reasons along with the uniquiness of the area I am in favor of Wilderness classification for the Dubois Badlands. 1

Response to Letter 41

1. The wilderness study for Dubois Badlands is being done under a separate document.

42

[This letter has been retyped for better readability.]

Please accept the following comments on the draft Lander Area Resource Management Plan/EIS.

BLM's 1984 report to congress states, "BLM manages more wildlife habitats than any other federal or state agency. The public lands are home to one out of every five big game animals in the entire United States, including most of the caribou, brown and grizzly bears, desert bighorn sheep, moose, mule deer, and antelope. BLM also manages 17 million acres of wetlands, 15.4 million acres of riparian habitats, 323,000 miles of perennial streams, and nearly 4.2 million surface acres of lakes and reservoirs. These lands contain more than 86,000 miles of streams that support trout, salmon, and other sportfish." This shows hunting and fishing opportunities offered on BLM land are numerous and impressive, but these opportunities need to increase as the demand for outdoor recreation increases. Today in Wyoming, a growing number of sportsmen and recreationalists feel they are not receiving a quality experience on public land. The report also demonstrates the BLM can best serve the public by placing management emphasis on wildlife and recreation.

One of the greatest faults of the draft resource management plan is its lack of alternatives which would increase wildlife and recreational opportunities. In fact, critical wildlife habitat would be jeopardized or lost if the plan is implemented as written. The most alarming example of this is the proposed oil/gas leasing with NSO stipulations of BLM lands on Whiskey Mountain, Red Canyon, and the East Fork elk winter range. Another example is locatable mineral leasing on the Lander Slope. These proposals are unacceptable. The idea to lease the entire 2.5 million acre Lander resource area for oil/gas is as unreasonable as proposing to change the entire 2.5 million acres into elk and bighorn sheep winter range. It is not in line with the multiple use concept when irreplacable critical habitat and winter is jeopardized by mining and oil/gas exploration and development. The NSO stipulations are not adequate protection for wildlife habitat.

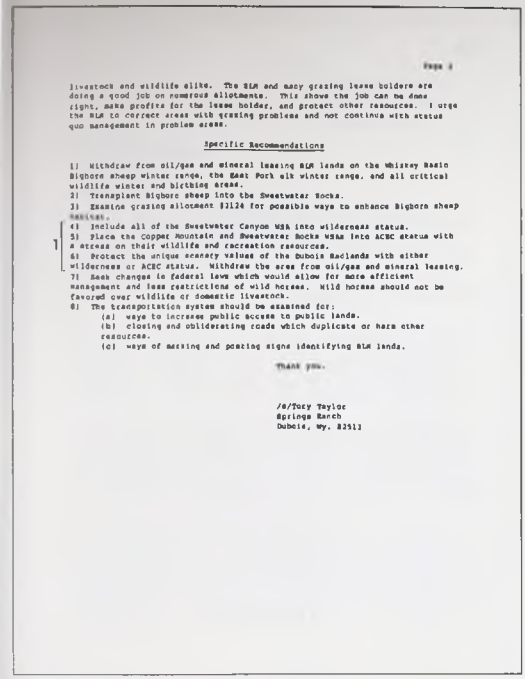
The BLM has signed an agreement with the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service to withdraw the East Fork elk winter range from oil/gas leasing. This agreement is still in affect. It is saddening and frustrating to spend time, energy, manpower, and money year after year in order to protect critical wildlife areas such as the East Fork elk winter range. The BLM is forcing extra work and a duplication of decisions by disregarding their agreement and proposing to lease the entire Lander resource area.

Another serious fault of the draft resource plan lies in the grazing program. The grazing supplement appendices show many grazing allotments having vegetative conditions rated as poor yet the allotments are categorized as "M" allotments. It is not fair to the public to manage their land in this manner. Now, during the planning stage, problem areas need to be identified and solutions proposed. An improvement of vegetative conditions will benefit

Response to Letter 42

1. The All Wilderness alternative was not chosen for the Sweetwater Canyon WSA because of conflicts with motorized access and mining claims. The area outside the partial wilderness is not easily blocked off to keep motorized vehicles out. If full wilderness designation were recommended, there would be conflicts with unauthorized motor vehicle use in wilderness. The partial wilderness recommendation eliminates this potential problem while still preserving the wilderness values of the canyon itself.

   ACEC designation was not recommended for the Copper Mountain and Sweetwater Rocks WSAs. Although both areas have significant values, we think ACEC designation is not necessary. The potential for development in the Sweetwater Rocks WSAs is very low, and other uses of the areas do not pose any danger to the important natural, recreational, wildlife, and cultural resources and qualities. The development potential is higher in the Copper Mountain WSA, but we believe that development can be planned to mitigate possible impacts on wildlife and recreational resources.



Page 2

livestock and wildlife alike. The BLM and many grazing lease holders are doing a good job on numerous allotments. This shows the job can be done right, make profits for the lease holder, and protect other resources. I urge the BLM to correct areas with grazing problems and not continue with status quo management in problem areas.

Specific Recommendations

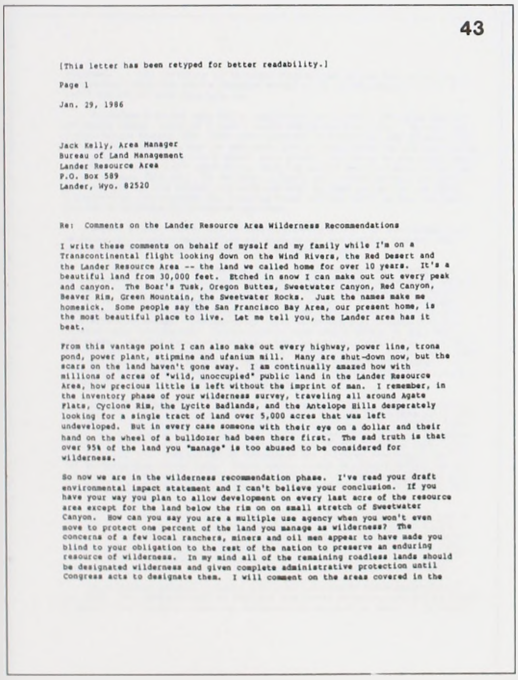
1) Withdraw from oil/gas and mineral leasing BLM lands on the Whiskey Basin Bighorn sheep winter range, the East Fork elk winter range, and all critical wildlife winter and birthing areas.
2) Transplant Bighorn sheep into the Sweetwater Rocks.
3) Examine grazing allotment #1124 for possible ways to enhance Bighorn sheep habitat.
4) Include all of the Sweetwater Canyon WSA into wilderness status.
5) Place the Copper Mountain and Sweetwater Rocks WSAs into ACEC status with a stress on their wildlife and recreation resources.
6) Protect the unique scenery values of the Dubois Badlands with either wilderness or ACEC status. Withdraw the area from oil/gas and mineral leasing.
7) Seek changes in federal laws which would allow for more efficient management and less restrictions of wild horses. Wild horses should not be favored over wildlife or domestic livestock.
8) The transportation system should be examined for:
   (a) ways to increase public access to public lands.
   (b) closing and obliterating roads which duplicate or harm other resources.
   (c) ways of marking and posting signs identifying BLM lands.

Thank you.

/s/Tory Taylor
Springs Ranch
Dubois, Wy. 82513

1

The Dubois Badlands management unit was reinstated as a WSA following the printing of the draft RMP/EIS. If wilderness designation is not chosen for the Dubois Badlands, they will revert to management proposed in the RMP/EIS. That plan recommends ACEC designation for the Dubois Badlands. This management would include "no surface occupancy" restrictions on oil and gas activities in the WSA-encompassed lands. Mining plans of operations would be required in the entire Dubois Badlands management unit.



43

[This letter has been retyped for better readability.]

Page 1

Jan. 29, 1986

Jack Kelly, Area Manager
Bureau of Land Management
Lander Resource Area
P.O. Box 589
Lander, Wyo. 82520

Re: Comments on the Lander Resource Area Wilderness Recommendations

I write these comments on behalf of myself and my family while I'm on a Transcontinental flight looking down on the Wind Rivers, the Red Desert and the Lander Resource Area -- the land we called home for over 10 years. It's a beautiful land from 30,000 feet. Etched in snow I can make out out every peak and canyon. The Boar's Tusk, Oregon Buttes, Sweetwater Canyon, Red Canyon, Beaver Rim, Green Mountain, the Sweetwater Rocks. Just the names make me homesick. Some people say the San Francisco Bay Area, our present home, is the most beautiful place to live. Let me tell you, the Lander area has it beat.

From this vantage point I can also make out every highway, power line, trona pond, power plant, stipmine and uranium mill. Many are shut-down now, but the scars on the land haven't gone away. I am continually amazed how with millions of acres of "wild, unoccupied" public land in the Lander Resource Area, how precious little is left without the imprint of man. I remember, in the inventory phase of your wilderness survey, traveling all around Agate Flats, Cyclone Rim, the Lycite Badlands, and the Antelope Hills desperately looking for a single tract of land over 5,000 acres that was left undeveloped. But in every case someone with their eye on a dollar and their hand on the wheel of a bulldozer had been there first. The sad truth is that over 95% of the land you "manage" is too abused to be considered for wilderness.

So now we are in the wilderness recommendation phase. I've read your draft environmental impact statement and I can't believe your conclusion. If you have your way you plan to allow development on every last acre of the resource area except for the land below the rim on on small stretch of Sweetwater Canyon. How can you say you are a multiple use agency when you won't even move to protect one percent of the land you manage as wilderness? The concerns of a few local ranchers, miners and oil men appear to have made you blind to your obligation to the rest of the nation to preserve an enduring resource of wilderness. In my mind all of the remaining roadless lands should be designated wilderness and given complete administrative protection until Congress acts to designate them. I will comment on the areas covered in the

Responses to Letter 43

1. The four WSAs collectively called the Sweetwater Rocks are analyzed separately in the final EIS. All Wilderness and No Wilderness alternatives were analyzed for each WSA. No boundary adjustment could be made on any of the four WSAs to reduce conflicts or to make a more logical boundary. Please refer to Chapter 1 for a discussion on the possibility of Congress designation one or more of the Sweetwater Rocks WSAs in any combination.

2. Wildlife and archeological resources were not identified as resources on which there would be significant impacts; therefore, they are not addressed in this EIS. No specific wildlife population was identified that would be affected with or without wilderness designation. Archeological resources would be protected regardless of wilderness status of the area. Recreational resources are discussed in chapters 3 and 4 for each WSA in the Sweetwater Rocks.

3. Dubois Badlands and Whiskey Mountains are being studied under a separate document.

dEIS, and mention two additional "Watt drops" that I fear will be next to get the axe if your anti-wilderness bias continues.

Sweetwater Canyon. Yes, the canyon deserves protection, but so does the surrounding roadless plateau. You are worried about the overuse that this small wilderness might receive. So why not include more acres and preclude motoried visitors from driving right up to the rim at every spot? The canyon bottom is great for fishing and hazardous (hopeless?) river running, but the surrounding rims offer vista points and a different experience. Given the roads in the area, one occasionally sees a truck from a perch on the rim, but most of the time there is a feeling of complete solitude. In summary, the entire roadless area would make a more complete wilderness and would provide additional protection for the canyon.

Sweetwater Rocks. Your recommendation for no wilderness here astounds me! This is perhaps the neatest wild area in the resource area. I had found hopes of eventually seeing the identified roadless areas linked into one unified area. Instead, I see every one of the units offered up to future development. If the Sweetwater Rocks endure so that our grandchildren can enjoy them, it appears that it will be because of blind luck and undevelopable terrain, rather than any foresight on the part of our federal land managers. Lankin Dome, Millers Pocket, the Moonstone, Split Rock and other special places are a national treasure, and I can't believe you are so willing to walk away from your obligation to protect and preserve this area. Many of the local landowners seemed quite willing to cooperate with wilderness management, but this dEIS seems to blame the hostility of local landowners for the non-wilderness recommendation. You may think that this area will "protect itself" from development. I pray you are right. But what's so wrong with some assertive land management to guarantee permanent protection instead of hoping for the best? Your all or nothing alternative for this complex of WSAs
1 is a clear violation of CEQ and BLM guidelines to examine the full range of alternatives. No attempt was made to redraw boundaries to reduce conflicts. No attempt was made to look at land exchanges to enhance the wilderness values of the areas. No attempt was made to look at the individual merits of each WSA. This entire analysis could have been written in the privacy of a closet without ever going to see the area first hand. It reflects no personal knowledge of the values that deserve protection. Your staff spent many days inventorying these WSAs but all their work has been lost in this sanitized,
2 totally inadequate, insensitive dEIS. What of the wildlife, recreational and archeological values that merit wilderness protection? Was all this lost? Your treatment of these WSAs is a complete disappointment.

Copper Mountain (Birdseye Pass). There's nothing superlative about this area in my mind, except that it is the last sizeable public roadless area in the entire Owl Creek/Bridger Mountain Range. When you look at the sacrificed land around Copper Mountain, a victim of thoughtless uranium exploration, you understand just how important it is to protect this one remaining island in a sea of development. You have an obligation to manage for the full range of multiple uses, and nowhere in this part of the resource area have you taken even the first step towards providing for primitive recreation and wildlife habitat protection. I'd like to see this area designated wilderness, but as the very least it deserves some sort of roadless area protection through administrative channels.

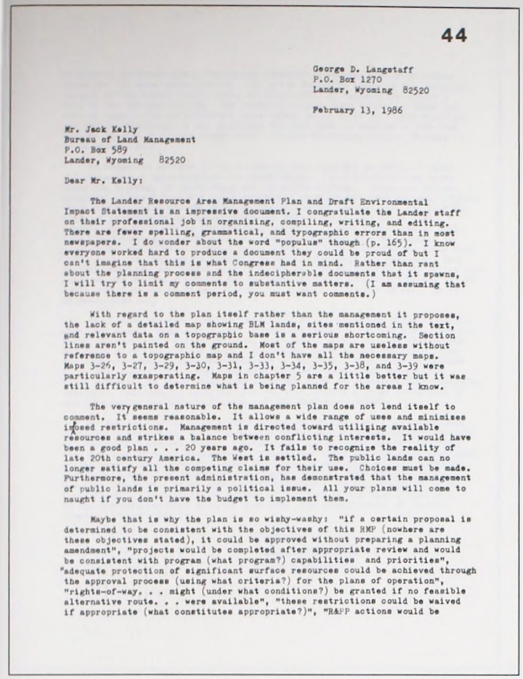
Dubois Badland. Please, please drop your anti-wilderness bias when you finally evaluate this area. Yes, it is small. But, it is one of the most remarkable areas in the state and it could so easily be lost forever if opened to abuse. I've spent some of my most enjoyable winter afternoons walking these colorful gulches and ridges. I urge you to spend at least a day
3 walking the interior (not driving the edge or flying over) before you pass judgement on this special place. The Dubois Multiple Use Association and other local interests complain about too much wilderness in "their" locality. But what the hell could you possibly do to "improve" these spectacular badlands? There's not a job at stake or a board foot of lumber to be cut in the whole place. Do they want to turn it into a motocross park or a town sanitary landfill? You are entrusted as the national stewards of this heritage...don't blow it.

Whiskey Mountain. There is no higher use than to protect this entire area for the bighorn. In my mind, wilderness designation offers the best, most permanent protection. Language to allow the state Game and Fish Department management flexibility (as contained in the Wyoming Wilderness Act of 1984) can be included when this area is added to the Fitzpatrick. Again, whatever designs the so-called Dubois Multiple Use Association has for this tract should be resisted.

Thank you for taking the time to read this letter. I hope you will change your recommendation before releasing a final EIS to reflect my concerns.

God bless the Lander area, and let's save some of it!

/s/Bruce Hamilton
731 Peralta Ave.
Berkey, Ca 94707



44

George D. Langstaff
P.O. Box 1270
Lander, Wyoming 82520

February 13, 1986

Mr. Jack Kelly
Bureau of Land Management
P.O. Box 589
Lander, Wyoming 82520

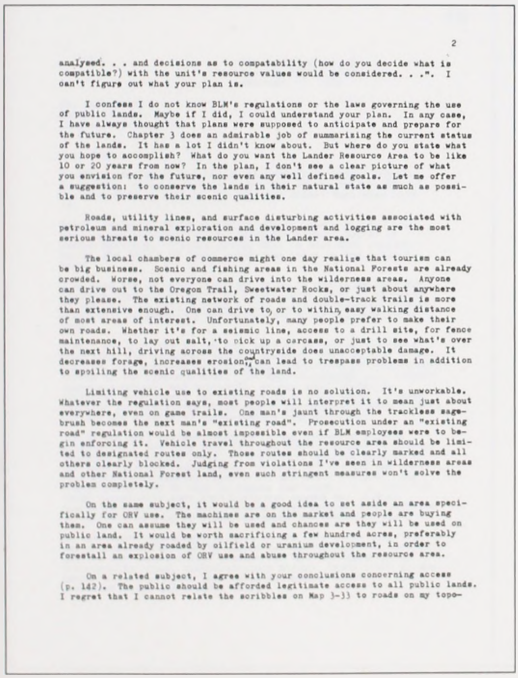
Dear Mr. Kelly:

The Lander Resource Area Management Plan and Draft Environmental Impact Statement is an impressive document. I congratulate the Lander staff on their professional job in organizing, compiling, writing, and editing. There are fewer spelling, grammatical, and typographic errors than in most newspapers. I do wonder about the word "populus" though (p. 165). I know everyone worked hard to produce a document they could be proud of but I can't imagine that this is what Congress had in mind. Rather than rant about the planning process and the indecipherable documents that it spawns, I will try to limit my comments to substantive matters. (I am assuming that because there is a comment period, you must want comments.)

With regard to the plan itself rather than the management it proposes, the lack of a detailed map showing BLM lands, sites mentioned in the text, and relevant data on a topographic base is a serious shortcoming. Section lines aren't painted on the ground. Most of the maps are useless without reference to a topographic map and I don't have all the necessary maps. Maps 3-26, 3-27, 3-29, 3-30, 3-31, 3-33, 3-34, 3-35, 3-38, and 3-39 were particularly exasperating. Maps in chapter 5 are a little better but it was still difficult to determine what is being planned for the areas I know.

The very general nature of the management plan does not lend itself to comment. It seems reasonable. It allows a wide range of uses and minimizes imposed restrictions. Management is directed toward utilizing available resources and strikes a balance between conflicting interests. It would have been a good plan . . . 20 years ago. It fails to recognize the reality of late 20th century America. The West is settled. The public lands can no longer satisfy all the competing claims for their use. Choices must be made. Furthermore, the present administration, has demonstrated that the management of public lands is primarily a political issue. All your plans will come to naught if you don't have the budget to implement them.

Maybe that is why the plan is so wishy-washy: "if a certain proposal is determined to be consistent with the objectives of this RMP (nowhere are these objectives stated), it could be approved without preparing a planning amendment", "projects would be completed after appropriate review and would be consistent with program (what program?) capabilities and priorities", "adequate protection of significant surface resources could be achieved through the approval process (using what criteria?) for the plans of operation", "rights-of-way. . . might (under what conditions?) be granted if no feasible alternative route. . . were available", "these restrictions could be waived if appropriate (what constitutes appropriate?)", "R&PP actions would be



2

analyzed. . . and decisions as to compatability (how do you decide what is compatible?) with the unit's resource values would be considered. . .". I can't figure out what your plan is.

I confess I do not know BLM's regulations or the laws governing the use of public lands. Maybe if I did, I could understand your plan. In any case, I have always thought that plans were supposed to anticipate and prepare for the future. Chapter 3 does an admirable job of summarizing the current status of the lands. It has a lot I didn't know about. But where do you state what you hope to accomplish? What do you want the Lander Resource Area to be like 10 or 20 years from now? In the plan, I don't see a clear picture of what you envision for the future, nor even any well defined goals. Let me offer a suggestion: to conserve the lands in their natural state as much as possible and to preserve their scenic qualities.

Roads, utility lines, and surface disturbing activities associated with petroleum and mineral exploration and development and logging are the most serious threats to scenic resources in the Lander area.

The local chambers of commerce might one day realize that tourism can be big business. Scenic and fishing areas in the National Forests are already crowded. Worse, not everyone can drive into the wilderness areas. Anyone can drive out to the Oregon Trail, Sweetwater Rocks, or just about anywhere they please. The existing network of roads and double-track trails is more than extensive enough. One can drive to, or to within, easy walking distance of most areas of interest. Unfortunately, many people prefer to make their own roads. Whether it's for a seismic line, access to a drill site, for fence maintenance, to lay out salt, to pick up a carcass, or just to see what's over the next hill, driving across the countryside does unacceptable damage. It decreases forage, increases erosion, can lead to trespass problems in addition to spoiling the scenic qualities of the land.

Limiting vehicle use to existing roads is no solution. It's unworkable. Whatever the regulation says, most people will interpret it to mean just about everywhere, even on game trails. One man's jaunt through the trackless sagebrush becomes the next man's "existing road". Prosecution under an "existing road" regulation would be almost impossible even if BLM employees were to begin enforcing it. Vehicle travel throughout the resource area should be limited to designated routes only. Those routes should be clearly marked and all others clearly blocked. Judging from violations I've seen in wilderness areas and other National Forest land, even such stringent measures won't solve the problem completely.

On the same subject, it would be a good idea to set aside an area specifically for ORV use. The machines are on the market and people are buying them. One can assume they will be used and chances are they will be used on public land. It would be worth sacrificing a few hundred acres, preferably in an area already roaded by oilfield or uranium development, in order to forestall an explosion of ORV use and abuse throughout the resource area.

On a related subject, I agree with your conclusions concerning access (p. 142). The public should be afforded legitimate access to all public lands. I regret that I cannot relate the scribbles on Map 3-33 to roads on my topo-

Responses to Letter 44

1. Our recommended management for the Sweetwater Rocks area is to retain the existing natural setting. Wilderness values probably will be retained because of the existing natural character of the area and the fact that little mineral potential is known to exist.

   Displacement of wildlife, primarily bighorn sheep, would depend on the extent and duration of human activity. At present, access is controlled mostly by private landowners. Management of access for bighorn sheep viewing and hunting will depend largely on cooperation from the landowners, not on wilderness designation.

   Ranchers in the Sweetwater Rocks area expressed concern that wilderness designation and uses would cause them more problems than the introduction of bighorn sheep. Only 20 hunting permits would be available at optimum population levels. There is also adequate high quality habitat on public land.

2. See response 2 to letter 23. The opportunities for solitude and/or primitive recreation in Sweetwater Canyon are confined mostly to the canyon and the river. The deep canyon, dense riparian vegetation, and numerous tributary draws provide a high degree of solitude. This contrasts significantly with the surrounding low, rolling hills and sagebrush-grass prairie outside the area that would be designated under the Partial Wilderness alternative. That alternative was designed to minimize conflicts with other uses and yet protect the most important wilderness attributes of Sweetwater Canyon.

3. The wilderness study for Whiskey Mountain and Dubois Badlands is being done under a separate document.

graphic maps. Since I can't tell what you plan, let me just say that designated access to Oregon Trail sites should be a high priority, to discourage unsanctioned access. Access to the edge of the Dubois badlands, Lysite badlands, and eastern Copper Mountain would be nice. All roads on Whiskey Mountain should be closed and converted to trails or rehabilitated. No one needs to drive to the wilderness boundary. Those who are not fit enough to ride a horse should not be driving on those roads either. More effort should be expended on obtaining easements than on maintaining roads. Roads of the quality of the Stanbaugh Loop are inappropriate in most areas. Of course access is of no use if you don't have a map that shows it clearly.

New utility lines should be restricted to corridors along highways, county roads and existing utility lines. Obsolete lines should be dismantled and rehabilitated. There can be no excuse for utilities on Whiskey Mountain, the Dubois badlands, Sweetwater Rocks, Beaver Rim, and along the Sweetwater River or Oregon Trail. I hope that Red Canyon and the Lander slope will be spared the blight of new utility lines. Utility lines crossing an otherwise natural and uncluttered landscape cannot be justified by economic reasons. The uncontrolled proliferation of power lines across the American Southwest was a tragedy I hope will never befall Wyoming. Pipelines can deface the land and destroy scenic values as much as other utilities and should be restricted accordingly. Where possible, utility lines should be constructed so as to minimize their visual impact.

Petroleum and mineral exploration and development should be allowed to the extent that associated surface disturbing activities can be minimized. The no-surface occupancy restriction should be applied to all scenic or environmentally sensitive areas that have less than a high potential for significant petroleum production. A plan of operation should be required for all surface disturbances, not just those greater than 5 acres. Such plans should be approved only if they demonstrate the need for the proposed activity and include provisions for minimizing impacts on scenic, habitat, and cultural resources. Maybe this would prevent the haphazard trenching that seems to have been prevalent during the uranium exploration era.

Logging should be allowed as long as the sale is profitable (i.e., the combined cost of timber improvement projects, surveying, marking, administering, cleaning up, and regenerating the sale is less than what the buyer pays) and involves no new road construction (skidding trails excepted). With the possible exception of Green Mountain, BLM timber cannot support large scale logging operations and should be managed accordingly. The emphasis should be on firewood, posts, and poles rather than on sawtimber of dubious value. While salvaging timber is a good idea in theory, it should not be done at a loss to the government. If you can't stand dead trees, burn them. Don't use taxpayers' money to give them away.

Although I enjoy wilderness, I doubt that many areas in the Lander Resource Area are suited to that classification. The presence of a major highway makes the Copper Mountain WSA an unlikely wilderness candidate. However, the area could be easily damaged because of the steep topography. New roads and ORVs should be prohibited. The no-surface occupancy restriction should apply to all but the area south of the 1560 m. contour (Map 7). The complex geology of the WSA, its scenic vistas, and its proximity to Boysen State Park suggest that

the area is most valuable as a recreational resource.

1 The Sweetwater Rocks are outstanding features that should be preserved in their natural state. Wilderness designation may not be necessary. Because of the extremely low potential for petroleum or mineral production, the WSA can reasonably be withdrawn from all leasing and exploration activity. Lands surrounding the rocks should be managed to maintain the scenic qualities and primitive aspects of the area. If bighorn sheep are introduced, wilderness designation would be necessary in order to prevent abuses by wheeled hunters/spectators. It is interesting that nuisance to local ranchers was cited as a reason for not recommending wilderness designation but it did not stop you from recommending the introduction of bighorn sheep.

2 The partial wilderness alternative recommended for the Sweetwater Canyon WSA is stupid. By allowing wheeled access and development to within ¼ mile of the river, you will insure that the wilderness won't be wilderness. The area beyond the canyon walls would provide a crucial buffer zone. If possible, the wilderness boundary should be extended beyond the WSA. People drive in to wilderness, but they usually don't go far. With the boundary back from the canyon a ways, maybe the few trespassers will drive only as far as the edge of the canyon and someone seeking solitude in the canyon might find it. I suggest you take stern measures to block the trail into the canyon near the confluence with Strawberry Creek and the stock trail along Strawberry Creek. On my one hike into the area, I saw no signs and was unaware that I was entering a WSA. But I did see tire tracks.

3 As for Whiskey Mountain, its proximity to other wilderness lands suggests that wilderness designation would be appropriate. This designation would also be in the best interests of the bighorn sheep herd. Wilderness designation would not affect the petroleum or mineral resources, which are negligible.

Any developments in the Dubois badlands would be incompatible with the preservation of the unique natural qualities of the area. Consequently, wilderness designation should be recommended.

Whether or not the WSAs are designated, or even recommended for, wilderness status, the BLM would be wise to make greater use of the ACEC classification. I would certainly recommend the Copper Mountain WSA, Sweetwater Rocks WSA, Dubois badlands, Whiskey Mountain, whatever parts of the Sweetwater River are on public lands, most streams in the South Pass area, much of the Beaver Rim, the Hatlestake Hills, most of the knobby hills in the Granite Mountains as areas of critical environmental concern. I would also recommend protecting springs in the Granite Mountains that have been severely overgrazed and trampled into oblivion but my map tells me most of them are unfortunately in private hands.

Castle Gardens certainly qualifies as an ACEC. I encourage you to preserve that fabulous area in a pristine condition. To control vandalism and ORV use, you might consider something like the Forest Service's Campground Host program. You needn't develop the facilities but some gravel in the parking lot would be appreciated.

With regard to cultural/historical sites, the primary concern should be

to prevent deterioration. Fences and identifying plaques should be considered for the more notable sites. All sites should be accorded the same protection as the Oregon Trail, i.e., no development or disturbance within 5 mile or the visible horizon. Any hardrock mining sites currently under BLM control should also be protected, even lesser known sites on Copper Mountain and Tin Cup Mountain. I was surprised the plan made no mention of the Pony Express Station where the Oregon Trail crosses Strawberry Creek. Perhaps it is on private land.

To summarize my view of the resources this area has to offer, I think the recreational opportunities are outstanding. There are developed sites along the highway, at South Pass, and at Castle Gardens. There are the undeveloped cultural/historic sites associated with the pioneers and gold mining. There are the hills and the streams, the plains and the deserts, the wide variety of fascinating geological features, the wildlife, and plant life. There's just being out in the middle of nowhere. I have found greater solitude truck-camping and hiking in the Granite Mountains than backpacking in some of the so-called wilderness areas in the Wind River Mountains. Your Maps 3-29, 3-30, and 3-31 may be technically correct but they are nonsense. They grossly underrate the area's natural qualities. Bouncing across one of the back roads of the Granite Mountains may be "semi-primitive motorized" to you but it feels pretty primitive to me. I like it. I want to be able to still do it 20 years from now.

The Lander Resource Area includes lands of extraordinary natural beauty: wide open spaces, sagebrush plains, wind-swept deserts, rolling hills, granite knobs, fantastically eroded badlands, and massive sheets of rock dipping off the flank of the Wind River Range. I consider these scenic qualities to be the most precious and important resource of the area. Most precious because it is most easily lost. Most important because without such beauty, the soul withers. In these times when everybody seems so concerned about budgets, economics, cost-benefit analyses, you would do America a great disservice by not considering the spiritual values of the lands you control.

My purpose then in writing this letter is to urge you to do your utmost to preserve the natural scenic qualities of the landscape and the wide variety of recreational opportunities. America needs its pristine natural heritage more now than it needs commodities. Undeveloped areas can always be developed if the need arises; developed areas can never be undeveloped. The Northwest has bigger trees, the Gulf Coast has more oil, nobody needs uranium anymore, and it's more efficient to grow beef in feedlots. I'm not saying the above uses of public lands should be prohibited but they should take a back seat to the one resource that no place else has: the unique beauty of central Wyoming. Think about it.

Sincerely,

George D. Langstaff

George D. Langstaff

45

330 South Asbury, #4
Moscow, Idaho 83843
February 15, 1986

Mr. Jack Kelly
Lander Resource Area
Lander, Wyoming 82520

Dear Jack:

Thank you for this opportunity to comment on Lander Resource Area's RMP. After working with you and others on the plan, I can certainly appreciate the time and effort that went into it.

First, one point about gathering public input--BLM did not send me any information concerning the comment period or public meetings. I would assume that to meet NEPA requirements, BLM should at least notify the folks on the mailing list.

I am glad BLM is compiling a set of goals and guidelines for longterm direction. But I am disappointed that, as stewards of the land, we have drafted a plan which concentrates almost completely on commodity production and badly neglects other uses.

When I was with the Lander BLM, many of my fellow employees understood and respected natural systems. They enjoyed working, hunting, and sightseeing with their families on the undeveloped tracts of our resource area. Yet this management plan largely ignores aesthetic and scientific values while promoting continued development and destruction of wild areas. I must question the directives which guided production of such a plan, despite the efforts of knowledgeable professionals.

One of the most obvious examples is the preferred grazing alternative. Not only does it allow for a possible 21 percent increase in stocking rates, it advocates numerous impacts in the name of range improvement. We need not clutter the range with additional fences, reservoirs, and water troughs. Nor should herbicides be used to reduce sagebrush. I am sure BLM range consultants know that livestock caused the initial vegetation shifts and that "undesirable" species will continue to dominate as long as stock overgraze the desirable ones.

In the forest management section of the RMP, I was surprised to see a proposed increase in timber harvest of over 100 percent. How can our resource area provide 6.2 MMBF of timber on an economically sound, sustained-yield basis? Trees taken in the Lander Slope and South Pass areas are simply not worth the resultant roads and denuded land.

Response to Letter 45

Thank you for your comments. Please see the response to letter 17.

BLM should not open any more land for mineral activities. The current policy withdraws only five percent of our resource area from oil and gas development, and the RMP calls for reducing this to one-fifth of one percent. I hope that the expected 1½ percent yearly growth of oil and gas development over the sixty years will be accompanied by a comparable growth of pristine acreage and quality trout streams. Areas such as Red Canyon, South Pass, Lander Slope, East Fork, Whiskey Mountain, Dubois Badlands, and the lands near Sinks Canyon State Park deserve withdrawal from all forms of mineral entry.

BLM should also curtail mining impacts on Green Mountain. This is one of my favorite places--my home during the summer of '82 when I volunteered for BLM. Yet I hate to go back and see how this mountain oasis is being devastated.

Some of the impacts of resource exploitation could be prevented if BLM would implement restrictions with some teeth in them. For instance, utility systems should be restricted to existing corridors in all cases, not just "when possible" (or convenient for developers).

The RMP should specify maximum allowable levels of siltation, surface disturbance, habitat destruction, and other impacts, and measures to insure these are met.

I was glad to see that the RMP does not call for additional recreation developments. The Continental Divide National Scenic Trail is no doubt more challenging and enjoyable without a fixed route through the area. And our present campgrounds are well-suited for appreciation of surrounding scenic and cultural resources.

More of our efforts should go toward preserving historic structures. At Miner's Delight the buildings are deteriorating badly; and at Radium Springs, one of the three cabins disappeared completely within the last 10 or 15 years. Roofs need to be fixed, walls stabilized, and drainage provided away from the foundations. A small interpretive plaque or brochure at Miner's Delight would also be helpful for visitors.

Other cultural resources deserve attention as well. I support designation of the Oregon/Mormon Trail corridor as an Area of Critical Environmental Concern, and South Pass as a National Register district. The entire resource area should be thoroughly inventoried for archeological values, just as it has been for range, mineral, and timber values.

Most important to me, BLM must strive to preserve the remaining scientific, aesthetic, and natural values of our pristine areas. I support Beaver Rim and Red Canyon as National Natural Landmarks, and portions of Beaver Creek, Gas Hills, Lander Slope, Red Canyon,

and South Pass as Areas of Critical Environmental Concern. I would also encourage establishment of Research Natural Areas to preserve representative communities for baseline data on Wyoming's ecosystems.

Wildlife habitat deserves enhancement in all areas, especially those of critical and crucial range. However, I do not feel that we should use herbicides and fertilizers. We need to concentrate on alleviating competition from domestic animals, ORVs, and human development.

I would also like to see bighorn sheep restored to their home range in Sweetwater Rocks. Perhaps someday we could restore wolves, grizzlies, bison, and black-footed ferrets to the areas they once frequented, too.

Finally, I cannot understand BLM's denial of the worth of our outstanding Wilderness Study Areas. During my work with Lander Resource Area, I inventoried each of these, and have also explored them on my own time. All eight are prime candidates for inclusion in our National Wilderness Preservation System. Each one has scenery, solitude, vegetation types, and recreation opportunities duplicated nowhere else in the nation.

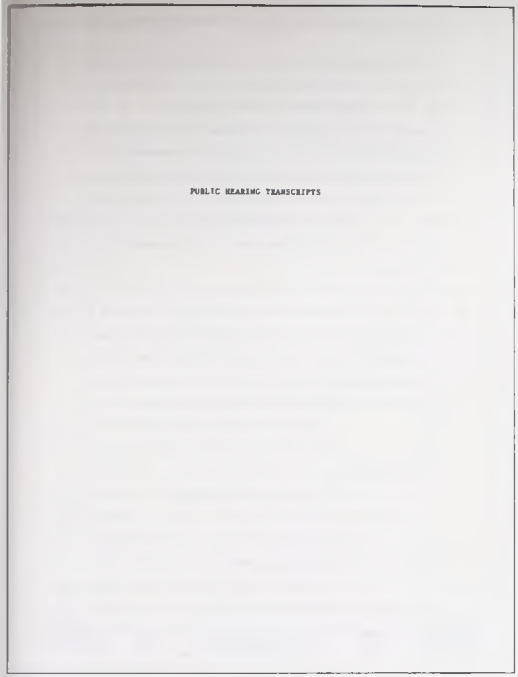
Yet BLM downplays their values and contrives excuses not to recommend them for Wilderness designation. I am astounded that such a proposal would come from my colleagues--professionals entrusted as caretakers of some of Wyoming's finest treasures.

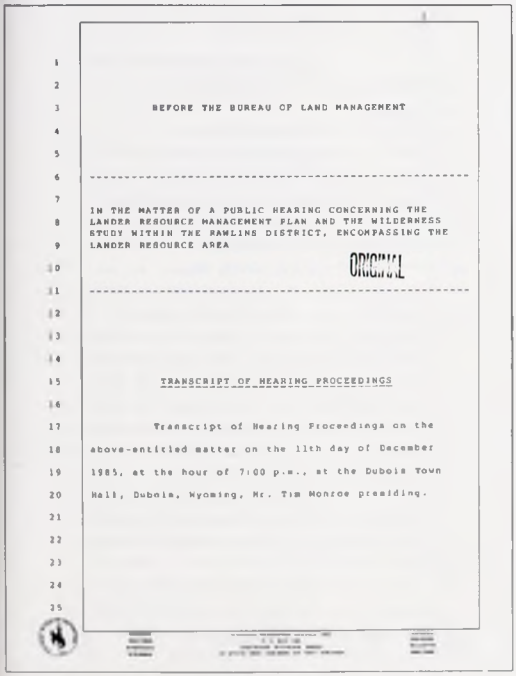
I hope that in revising our RMP, BLM will take to heart its multiple-use mandate and provide a plan which gives fair value to all resources. I want my children to be assured of the same chance I had to hike over rolling hills to Sweetwater Canyon, peer into cabins at Miner's Delight, study tipi rings in Sweetwater Rocks, and see the beauty of Wyoming from the top of Green Mountain.

Most sincerely,

Lynn Kinter

Lynn Kinter




BEFORE THE BUREAU OF LAND MANAGEMENT

IN THE MATTER OF A PUBLIC HEARING CONCERNING THE LANDER RESOURCE MANAGEMENT PLAN AND THE WILDERNESS STUDY WITHIN THE RAWLINS DISTRICT, ENCOMPASSING THE LANDER RESOURCE AREA

ORIGINAL

TRANSCRIPT OF HEARING PROCEEDINGS

Transcript of Hearing Proceedings on the above-entitled matter on the 11th day of December 1985, at the hour of 7:00 p.m., at the Dubois Town Hall, Dubois, Wyoming, Mr. Tim Monroe presiding.

Hearing Transcripts

This section contains transcripts of the public hearings held in Dubois on December 11, 1985, and in Lander on December 12, 1985. Both public hearing transcripts are printed in their entirety.

P R O C E E D I N G S

HEARING OFFICER MONROE: Well, it's the appointed hour and the hearing will come to order.

Let me introduce myself. I am Tim Monroe, the district manager from Casper, and I have been appointed by the state director to be the hearing officer tonight, a hearing concerning the Lander resource management plan and environmental impact statement and the wilderness study areas within the Rawlins District encompassing the Lander Resource Area.

Most of you signed the attendance sheets. I think all four of you did as you came in. And if you would like to make a statement, be sure and check that space on the list or somehow make your intentions known to us.

The official reporter tonight is Jack Walz of Wyoming Reporting Service in Casper. He will prepare a verbatim transcript of everything that's said in the hearing. And if you wish to obtain a copy of it, you can contact Jack tonight or later at your conveniences.

The hearing is being held to obtain comments on the preferred plan for the Lander Resource Area, including recommendations regarding six wilderness

study areas. A draft resource management plan and environmental impact statement on the subject has been published and is available in the room or outside, if anyone wants a copy to take with them.

A few words about our procedure tonight: The hearing is not a debate, a trial or a question-and-answer session. It's an advisory hearing required by law and regulations and all interested persons may present statements either written or oral or both or other information pertinent to the RMP, including the wilderness study areas we are considering tonight.

There will be no cross-examination from the audience, but if anyone doesn't understand the statement of a speaker or you need to make a clarifying question, just refer that question to us and we will determine whether or not it's pertinent and see if we can get an answer. This does seem kind of overly formal, but it's intended to give everyone a fair and reasonable opportunity to present their views.

Any written statements in addition to oral statements will be included in the full transcript and will be considered on the same basis as spoken statements. You may also submit written comments

until February 14, 1984. And those will be included in the formal hearing record and be considered fully.

Any comments should be addressed to Jack Kelly, the area manager, Bureau of Land Management -- Jack is sitting here -- Box 589 in Lander, 82520, or to Gene Kolkman, who is the team leader on the plan, at Box 670 in Rawlins, 82301.

The hearing will begin now and we will offer the floor to anyone who would wish to make a statement.

(No response.)

UNIDENTIFIED SPEAKER: This must be off the record, but I am not prepared to make an oral statement at this time. But I am planning to make a written comment at a later date. I am just not prepared to make a statement at this time.

HEARING OFFICER MONROE: Ma'am?

MS. HICKS: I didn't realize this was a public hearing.

HEARING OFFICER MONROE: You are in the right hearing.

MS. HICKS: Yeah, I am in the right one. I have some opinions on both areas.

UNIDENTIFIED SPEAKER: I come to listen. I didn't come to testify. I plan to do that later.

HEARING OFFICER MONROE: Would you prefer to send in a written statement then, a formal statement?

UNIDENTIFIED SPEAKER: Yes.

HEARING OFFICER MONROE: By the 14th of February. Fine. That will be welcome. And it's given the same weight as presenting testimony.

MS. HICKS: There is going to be no presentation by the BLM tonight?

HEARING OFFICER MONROE: Not the hearing part of it. It's a two-part hearing. The hearing is on the RMP and EIS, the regional management plan and environmental impact statement. Following the hearing will be a scoping meeting on the two additional wilderness study areas that have been added as a result of litigation. So they have to do some supplemental preparation of documents and analyses, studies, that sort of thing on two new WSAs. I suspect that's what you're primarily interested in.

MS. HICKS: Yeah. But, you know, if nobody says anything, that means that the hearing record records that nobody in Dubois had anything to say?

HEARING OFFICER MONROE: During the hearing. But the record is open until February the

14th for supplemental information or plain new statements.

MS. HICKS: I feel uneasy about that.

MR. STORY: As I understand the supplement -- I have read it all, but there is so much volume of information, that I didn't get -- I am not sure that I retained all of it.

HEARING OFFICER MONROE: Sir, excuse me. Could you identify yourself?

MR. STORY: I am John Story. I manage ranches for Parker Land and Cattle Company. And as I read it, basically the entire thing in that there is not really going to be much change from what -- you know, no drastic changes anyway in the plan. I don't really know whether that's good or bad. So I am going to just reserve my comments and see what else happens.

I really am more interested in the two new proposal -- not new proposals, but reinstated proposals to hear what's going to happen or go on there. I have some mixed feelings about the establishment of rules and guidelines for establishing a wilderness area and then just as soon as that doesn't fit some special interest group's own idea, well, then they can change their criteria. I

don't think that's correct.

HEARING OFFICER MONROE: You mean the study criteria?

MR. STORY: No -- well, yeah, but on the whole criteria for setting up these isolated spots for wilderness consideration, because neither one of those fit the criteria and I don't -- you know, I can't see where special interest groups can come in and change the criteria to fit their own bailiwick.

MS. HICKS: I don't know. I think I ought to identify myself. My name is Lanie Hicks and I am a Sierra Club member and I am a member of the Wyoming Wildlife Federation. And I fully agree with the interests of John Story, and I am very much in favor of the grazing. But I also support wilderness and I do think that at least the badlands qualify for wilderness. And I am very interested in hearing what you have to say about it.

HEARING OFFICER MONROE: Sir, we have already opened the hearing, and the time is now for anyone wishing to make a statement on the draft resource management plan and environmental impact statement. I know you just came in out of the cold, so to speak, literally. We would sure welcome anything you had to say on it.

MR. BENSON: I would like to --

HEARING OFFICER MONROE: Would you identify yourself, please?

MR. BENSON: Yeah. My name is Scott Benson. I am here in Dubois. I would like to know why the BLM seems so afraid of prescribed fires.

HEARING OFFICER MONROE: Well, as I explained during the opening remarks, which unfortunately you missed, this is a hearing to receive testimony and not a meeting that we would normally have to have a dialogue on issues related to federal land management. I know we can answer that question after the hearing part of this is over, which probably won't be much longer.

Jack Kelly, the area manager here, Dick Rostin, the district manager for the Rawlins District is also with us, and I know they can answer your question.

MR. BENSON: Okay.

HEARING OFFICER MONROE: Did you have any comments on the -- to turn that around a little bit, did you have comments on areas or methods or the need for burning?

MR. BENSON: Yeah. I think alternative need for management of fire management should be the

preferred alternative.

HEARING OFFICER MONROE: Is your interest based on rangeland management needs or improvement of wildlife habitat, or what's your interest?

MR. BENSON: Well, I think BLM should be a professional land management agency. As such, they shouldn't take the attitude that all fires are bad when I think everybody is aware that some fires in certain areas will benefit wildlife. They will benefit the rangeland. I think they should approach it with that attitude.

HEARING OFFICER MONROE: The gentlemen here in the maroon sweater, did you care to make a statement?

UNIDENTIFIED SPEAKER: No. I just come to listen. I am going to send in written comments.

HEARING OFFICER MONROE: Did you hear that the record is open until February 14th --

UNIDENTIFIED SPEAKER: No.

HEARING OFFICER MONROE: -- for written comments? Yes, it's a 90-day comment period.

UNIDENTIFIED SPEAKER: What is the difference in the value placed on the public hearing comments versus the written comments?

HEARING OFFICER MONROE: None. Both types of comments are given full consideration and full utilization. I realize that at this time and the way the weather is, it's hard for people to get into town or get out to public hearings or even take the time to read the material ahead of time.

Mr. Bastin, do you want to recess the hearing in case somebody else comes in and then go into your scoping part of it?

MR. BASTIN: Unless someone else has formal statements to make, I recommend we close the formal part of the hearing and we will be available for some questions and answers on the RMP, unless anybody on the panel has any questions.

MR. KELLY: I would like to respond to some of the points that have been raised.

MR. BASTIN: Once we close the hearing, we can do that.

MR. BENSON: I would like to ask one final question before we get started. How much of this plan -- by reading through it, it seems a lot of it is still up in the air after this plan has been initiated. How much can be changed at the discretion of a regional director or state director? Are you going to stick by this plan or is this going to be

followed for the next 50 years, or as a new director comes in, will things change with him?

HEARING OFFICER MONROE: The way the procedures are, you go through a draft plan. Then you do the final plan. Then you take the comments that are received, or say a protest comes in on the final plan or something like this, and you issue a record of decision after the comment period is closed on the final plan. And that sets forth based on all the public comments and all other sources of information the final planning decisions. And that record of decision is the management prescription for a number of years, basically ten years, ten to fifteen years, although plans can be modified or amended during that process.

There is a formal procedure for modifying or amending the land use plan. And you say the state director or another person can come in and change it, only through a prescribed process that would modify the plan or amend it in an open atmosphere. The plan carries a lot of weight in the way the statute is written that calls for land use planning and the way plans are developed and then approved and administered.

So there is quite a program there that both

the Forest Service and BLM are pretty much on parallel tracks on it. Our laws are very similar and regulations are very similar.

MR. BENSON: That brings up another question as to how much integration was there in formulating this plan as compared to the Forest Service Shoshoni Forest plan that just came out. It seems that certain areas there is a lot of discrepancies to neighboring pieces of land. They're managing it one way and you are managing it another way. And the proposal is still, I believe, for land trades with the Forest Service.

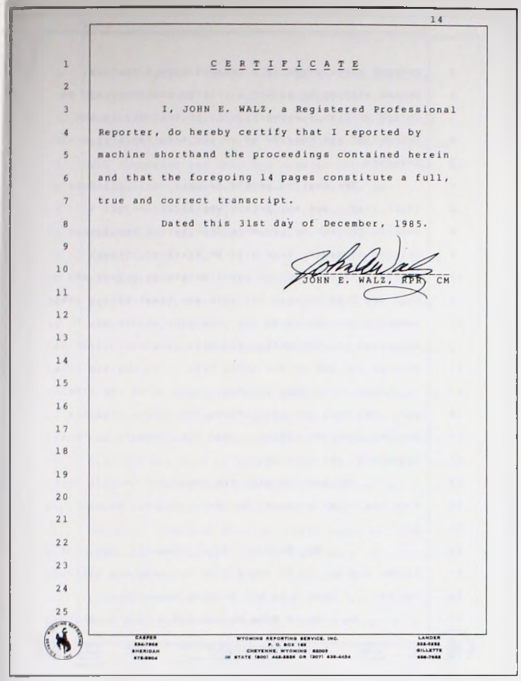
HEARING OFFICER MONROE: Yes, the interchange is an issue that would be dealt with. And I know what we have done in our district in Casper is identify areas that are available for disposal, which means sale or exchange, long-term leases, this kind of thing, well, mostly sale or exchange. And I don't know. I am sure by the final -- when the final plan comes out, they will have considered those type of things. We are required by law to have a certain level of consistency with plans of Indian tribes, state and local government, this sort of thing.

If there is no further comments, we will

close the hearing, subject to reopening it if some people arrive, and go into the scoping session. We can hold it for another twenty minutes or so; and if no one else shows up with a statement, why, we will be closed at that time.

Thank you.

(Hearing proceedings adjourned 7:15 p.m., December 11, 1985.)



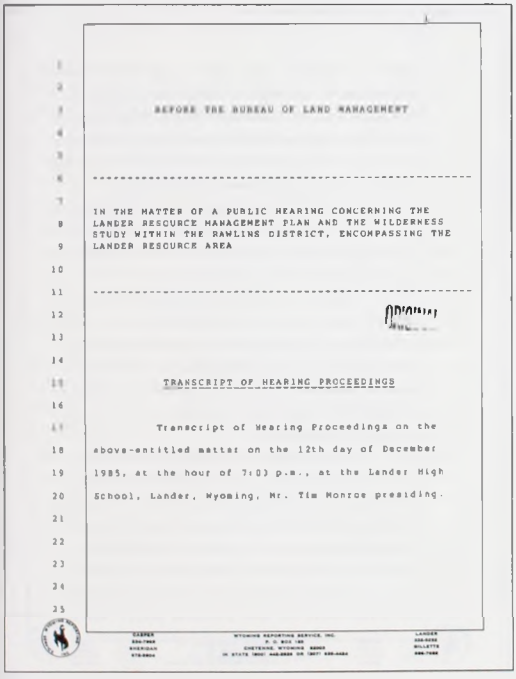
14

CERTIFICATE

I, JOHN E. WALZ, a Registered Professional Reporter, do hereby certify that I reported by machine shorthand the proceedings contained herein and that the foregoing 14 pages constitute a full, true and correct transcript.

Dated this 31st day of December, 1985.

JOHN E. WALZ, RPR, CM



BEFORE THE BUREAU OF LAND MANAGEMENT

IN THE MATTER OF A PUBLIC HEARING CONCERNING THE LANDER RESOURCE MANAGEMENT PLAN AND THE WILDERNESS STUDY WITHIN THE RAWLINS DISTRICT, ENCOMPASSING THE LANDER RESOURCE AREA

ORIGINAL

TRANSCRIPT OF HEARING PROCEEDINGS

Transcript of Hearing Proceedings on the above-entitled matter on the 12th day of December 1985, at the hour of 7:00 p.m., at the Lander High School, Lander, Wyoming, Mr. Tim Monroe presiding.

Responses to Comments Made at Lander Public Hearing

1. See response 1 to letter 23.
2. It does not matter who is using the vehicles; any vehicle use constitutes a management problem when it occurs in the designated wilderness. It would be extremely difficult to eliminate ORVs from the 3,000 acres excluded from wilderness designation under the Proposed Action.

PROCEEDINGS

HEARING OFFICER MONROE: Good evening, ladies and gentlemen -- gentlemen. The public hearing will now come to order.

Let me introduce myself. I am Tim Monroe, the district manager from Casper, BLM, and I have been asked by the state director to come over and chair this hearing.

The purpose of the hearing is concerning the Lander resource management plan and wilderness study reports within the Rawlins District which encompasses the Lander Resource Area.

You have all signed the attendance sheets as you came into the room. But if there is anyone that didn't sign up, we would appreciate you doing it if you plan to make a statement. There is one person here that has an X by his name, and that person will be called upon to make his statement that he or she wishes to offer.

The official reporter tonight is Jack Walz of Wyoming Reporting Service in Casper. He will prepare a verbatim transcript of everything that's said tonight. If you wish to obtain a copy of the transcript, please contact Jack and make your arrangements directly with him.

The hearing is being held to obtain comments on the preferred plan for the Lander Resource Area which includes recommendations for six wilderness study areas. A draft resource management plan and environmental impact statement has been prepared and is available in the room if anyone wants a copy. There are some on the table right there.

A few words about our procedure tonight: This is a hearing as opposed to the normal BLM public meeting. The hearing is not a debate. It's not a trial. It's not a question-and-answer session. It's an advisory hearing. And all interested persons are asked to present their statements or their comments, either written or oral or both, or information pertinent to the draft resource management plan, including the wilderness study areas that we are considering.

There will be no cross-examination from the audience or from myself or the panel members that are here. We are simply here to receive your information and learn what we can about your views on the resource management plan and the environmental impact statement.

This does really seem overly formal. But it's intended to give everyone an opportunity to

present their views in a nonadversary situation. Anyone wishing to submit a written statement may do so and written statements will be included in the transcript and considered on the same basis as oral comments.

The hearing record is open until February 14th, 1986. And any person who after tonight's hearing desires to get more information and submit written comments, they will be accepted through February 14th and given equal weight to anyone who took the time to come out here and speak or any other comments we receive on it. Comments should be addressed to Jack Kelly, the area manager -- Jack is over at the end of the table here -- to the BLM here in Casper or to Gene Kolkman. Gene is on the other end. And they are surrounding Bob Tigner from the Rawlins district office. Send the comments to Gene Kolkman if you care to.

The hearing will now begin and we will hear from the first witness, Mr. Mike Massie. Welcome, sir.

MR. MASSIE: First comment: You need a higher podium. I am sorry I am the only one talking tonight. I hope I am not keeping anyone here.

My name is Mike Massie and I live in South

Pass City, Wyoming. And I am chairman of the Wyoming chapter of the Sierra Club, and I represent about, oh, approximately 600 members who live here in Wyoming. And I would like to briefly talk about the resource management plan, a little bit more specifically about the wilderness part of that particular plan.

I would like to address four points but just in a general fashion. A lot of the details, a lot of the specifics I will just put into the written record and submit that before February 14th.

The RMP contains a few good points but I believe that there are several weaknesses in the plan. First of all, the BLM and in a lot of its publicity throughout the years has expressed or has listed a balanced management approach or generally a multiple-use approach. And there is nothing wrong with that if that's obtainable.

It's definitely an abstract concept and it's not always obtainable. But I think it can be here in the Lander Resource Area. But the draft RMP sort of decries some myth that the BLM is trying to reach in balanced management of the plan. It's heavily dominated by oil and gas, timbering and grazing.

Now, grazing has been going on here in this particular state for over a hundred years. And for

the most part, ranchers have shown that they can manage the land quite well, especially in the cooperative relationship with the land management agency. So I would like to focus on the oil and gas and timbering and show the premise that these sort of things are really out of balance in the RMP.

Essentially the best illustration is essentially the facts. There is a proposal of approximately six million board feet per year that are supposed to be cut. The RMP also proposes 2.4 million acres for oil and gas development, yet at the same time proposes 5,700 acres for primitive recreation and wilderness. That to me is just not a balance.

On the wilderness question, many other of the resource areas in Wyoming have already given their wilderness recommendations and they are much like the one here in Lander. For instance, the BLM down in Rock Springs recommended only one and a half areas out of 13. So far, here in the Rawlins District, combined with the other resource area, it's about one and a half out of eight with two more still to be studied. In Casper, there are no recommendations for wilderness study areas out of the ones they have had up there. And the same with

was created, that area has been roadless. That's why it's a wilderness study area. The wilderness characteristics are there. They have not been touched by oil and gas development and timbering. That's why it's a wilderness study area.

So if you are going to continue management of it and you're going to continue this type of land use, that is wilderness. I think they were just trying to present some kind of image to the public that by continuing present management, they aren't out there to change anything; whereas, if they really want to do as is recommended, that is, lease for oil and gas and make it nonwilderness, that is the change, not keeping it for wilderness.

Now, in the specification areas, Sweetwater Canyon, now, I gather from reading the wilderness supplement that the reason for leaving out approximately 3,000 acres and recommending 5700 acres for wilderness but leaving the 3,000 acres out is because it conflicts with motorized vehicles, but the study is not clear as to who uses these motorized vehicles.

It sort of alludes a little bit to ranchers in there. But other places it alludes to people who go in there and fish and who go in there to hunt or

Worland.

So essentially what that comes down to, out of 29 WSAs that have been looked at so far, three have been recommended for wilderness. So this plan is definitely keeping with that.

In fact, if you look at the oil and gas recommendations for leasing as opposed to what's recommended for wilderness, a hundred percent of the land in this resource area is recommended for oil and gas leasing. One-tenth of 1 percent is recommended to preserve its natural characteristics.

Essentially, that means a thousand times more land will be devoted to oil and gas development or at least leasing than it will be for the preservation of this area's unique beauty. This isn't balanced. This to me is not multiple use. And in fact, there are more uses in wilderness than you can get by going out and poking a hole in the ground or clearcutting an area.

I object to the wording in the alternative. Several times the recommended or the preferred alternative is continuation of present management. Essentially that means not designating the area for wilderness. It's nonwilderness use. But if you look at the use of the area in the past, since the earth

people who just like to go in there in their Jeep or whatever and run all over the place. So it's not specific as to why these 3,000 acres were thrown out and what user group will be using the area for use by motorized vehicles.

If you look at ORVs, they can use pretty much all of the lands throughout the BLM area. And there are legitimate uses for ORVs on BLM land. But if you look at the thousands and possibly millions of acres in the resource area that ORVs can use, taking in another 3,000 and putting it in wilderness designation isn't going to make that much difference. And as far as rancher use, as the study also pointed out, there are only two grazing allotments in this WSA. One of them has 1 percent of the allotment in the WSA. The other one has 12 percent.

So I don't think motorized use in that area is going to hurt grazing allotments that much. So I don't know why these 3,000 acres have been excluded. On the other hand, they are important to preserve the integrity of the area.

As the BLM admits in the study, the WSA has great fishing, excellent solitude and natural features. So you would have a greater positive impact on these area's society as a wilderness than anything

else. That's pretty strong language. Why doesn't that jibe with the recommendation? I think the entire area should be preserved as wilderness.

By the way, the only area which is recommended for Wilderness, the 5700 acres, is on steep canyons and you can't drive a vehicle up it. I don't think too many cows can graze up it. You can't puncture a hole in it and you can't timber it. So there isn't much of a compromise. There isn't anything to do with it but make it a wilderness.

Sweetwater Rocks, once again, the purpose of the wilderness review is to look at an area's solitude, to look at the area's potential for recreation. And the BLM admits that Sweetwater Rocks has excellent potential for this, both solitude and recreational values. Why isn't it wilderness?

Once again, it's not really clear as to why it's not wilderness. In one part of the study, sort of buried away, are some objections by some of the ranchers who work in the area. One of the objections is that wilderness designation would bring more people into the area. This a lot of people refer to as sort of a neon light syndrome; that is, as soon as something is made wilderness, people are going to find out about it all over the area and come into the

area.

Now, that may have some legitimacy in certain forest land, say, around Yellowstone Park. It's not going to have legitimacy around an area that is much smaller. In addition, the study admits people that use the area are almost entirely dependent on Jeffrey City. And considering that population has gone down, less people are using it lately. So making it wilderness will not bring a lot of new people into this area.

Another one of the objections is it will affect their life-style. Well, it's wilderness now. People use it because of its primative setting and I don't think that's going to change with wilderness.

But look at the alternative. The BLM would like to make this an ORV area and advertise it as such. You know, if the people in the area are worried about some pine needle junkies coming into the area and destroying the land, they are really going to have a lot of problems with ORV people coming into there. They are notorious for not staying on the road. They are also going to bring vehicles into this the area, not just backpacking.

So if it's going to affect the life-style and bring more people into the area, actually, the

plan of making it an ORV area is going to do that. The area definitely deserves wilderness designation. It's a unique area and you are just not going to find that kind of setting anywhere else in Wyoming.

Finally, Copper Mountain: The proposal is to open up this area for ORV and oil and gas use, but there is really not a detailed study of what kind of impacts oil and gas use and ORV use are going to have on this area. It is admitted that wildlife are going to be adversely affected and there are many more roads built because of oil and gas development, especially on the southern part of Copper Mountain.

At the same time, BLM says they are going to improve wildlife habitat up there too. You can't do both. You can't expect an increase in the deer herd and elk herd in the Copper Mountain WSA if you are going to also go in there with oil and gas development and have a road too. You can't do both. That's why more studies need to be done.

There is no study of the recreational potential of Copper Mountain. Copper Mountain is right next to Boysen State Park which has an annual attendance of about 200,000 people a year. In addition, it's right next to the Elk Creek Mountain, which also has an outstanding recreational potential.

So while oil and gas development in the southern part is high, so is the recreational part, too.

In summing up the wilderness recommendation, these are the only vestiges we have left or only means we have of preserving the important parts of the Lander Resource Area in its natural habitat. To environmentalists, they're important areas. It's like the Sierra Club coming in and telling them to close down the Gas Hills for no particular reason at all, just close it down because we want to make it natural.

Now, we will never say anything like that. But for the reasons that we are closing down what we perceive as our Gas Hills, our real important wilderness areas, there really aren't any good reasons for doing that. There really aren't any land use conflicts, or land use conflicts that can't be worked out. You know, they are the only vestiges that are left. Let's preserve them. They are important to be preserved.

On oil and gas leasing, very quickly, once again, the proposal is to lease a hundred percent of the area. We do not have any problems with oil and gas development in Lander Resource Area. That's fine. We do have a problem with all of the land being

leased and developed pretty much. We think that there are conflicts out there and resources that should be protected that will be impacted by oil and gas development.

One of the problems with the study is its reliance on surface occupancy stipulations. Essentially, that means if you have a lease and if you want the oil, you have got to find some other way of getting it out of there rather than going on that land physically and doing it.

That sounds okay and that sounds like a way of protecting what's up on top. And if the oil companies have a way directly of getting that gas out of the land by angle drilling or other types of means, then that's fine. But there is a lot of areas where they are not going to be able to do that. And it has been shown in other cases where these oil companies can go back in and get those surface stipulations dropped. They can remove that surface occupancy stipulation somewhere down the line.

So there is no guarantee. So if you have an area that has surface occupancy, you think it's going to preserve its natural integrity or the ruts of the Oregon Trail, it does not guarantee it.

In addition, while there has not been a

to protect a lease and they have leases there, other people can still use the roads and disrupt the habitat.

In fact, the Game and Fish has pretty much espoused the idea that if you have about two miles per square mile of road, two miles of road per square mile of forest lands, then you are going to have an adverse effect on the elk.

That's probably even more true on BLM land. And that's one thing which I feel is one of the weakest parts of the study is it doesn't look at the impact of roads on wildlife. And seasonal stipulations will not get rid of these roads and their impact.

Finally, certain areas of real sensitive nature in the Lander Resource Area should be withdrawn from oil and gas leasing all together. That includes the Oregon Trail, Mormon Trail Corridor. There is no reason to develop that stuff. The Oregon Trail and Mormon Trail is definitely worth preserving.

South Pass Mining District: Even though there are no surface occupancy stipulations, once again on those things, there is no guarantee for the future. Obviously, all wilderness areas, we do not believe that those should be leased, and important

court challenge of NSOs or no surface occupancy stipulations, there certainly can be in the future. Some people, some legal companies who represent oil companies think that there may be a good challenge there.

In addition, oil and gas leasing, as the study also admits, is going to have an adverse effect over big game over the next 60 years. Big game now is fighting for survival and BLM is important. A lot of people sort of perceive some of these rocks as sterile. There is some important wildlife habitat, in fact, quite a bit.

If the Yellowstone National Park and Grand Teton National Park go ahead and protect all that wildlife after all the Forest Service works hard to protect all their wildlife, it can still be jeopardized by what happens on BLM lands.

There are some critical wildlife corridors as well as summer and winter habitats and they are certainly in the Lander Resource Area. I think those areas need to be withdrawn from leasing, oil and gas leasing.

Seasonal stipulations to protect the wildlife doesn't really happen, especially if there is roads there. If a company puts a road in in order

wildlife areas, especially elk, sheep, deer and antelope areas and the natural and recreational areas. There will still be plenty out there to lease for oil and gas development. In other words, we need to protect these other resources.

For timbering, timbering causes some real concern on the Green Mountain area. In fact, I am concerned about Green Mountain altogether. There seems to be an awful lot of oil and gas leasing that's going to be up there as well as an increase in timbering, from 750,000 board feet per year to 2.2 million. That's about a big increase in timbering. And once again, there is no analysis of impacts that roads are going to bring up there. But nevertheless, Green Mountain has quite a bit of wildlife up there as well as scenic beauty and there is no analysis as to exactly what kind of effect it is going to have on the wildlife herds in this RMP.

So I would suggest keeping the present board feet and also to looking to removing some oil and gas leasing from the area that's affected to protect the wilderness. The six million board feet or generally what the Lander Resource Area is going to shoot for is pretty large. I think that should be reduced also, especially in the Green Mountain, Dubois area and the

Lander slope. I think that is over -- is going to be overtimbered.

Now, I think that one part of the study is good in that it shows what the various demands for timber is going to be. And timbering to provide for the local economy, local companies, is fine. But the BLM should not be a reservoir for the large companies to come in here and take out so much wood. Once again, like the Forest Service study, timbering does not benefit wildlife. And that is found throughout the study. When timbering benefits wildlife is when you have a large forest area that doesn't have much open spaces. Then timbering can do it. But I don't think there is any here in the BLM land that is so forested that you have to go in and clearcut it to open up some forest. And it isn't on the Green Mountain. Presently, those conditions aren't present. And once again, roads can have a major impact on it.

Now, what are the positive aspects? I think that the RMP is very good on the South Pass Mining District and the Oregon Trail. The South Pass mining area is one of the most historic areas in Wyoming. And this plan does a good job of protecting that. It asks for mining plans from the miners who are going to be working in the area while at the same time

doesn't cut back in the historical use of the area. Mining is a legitimate use of that area.

It also protects the historical use resources. And even though my own quibble is the more surface occupancy stipulation on the mining, I think if those things are stuck to by the BLM, then I think that area will be preserved, the same with the Oregon Trail. And it's important to preserve those cultural resources. In fact, of all of RMPs I have read, this is by far the best on cultural resources.

Concluding -- finally, right? -- the RMP needs more balance. It needs more primitive recreation. It needs more wilderness areas. It needs less oil and gas use. All of these are legitimate uses of BLM land but they should be coming closer to the balance.

In addition, this study does not really look at what this grandiose plan, the Lander Resource Area, the impact it's going to have on the area's towns. You know, if 2.4 million acres is leased and even a small fraction of that starts to get developed, you're going to have a big oil and gas boom in this area, something that's going to rival Evanston. If there is no impact as to what that's going to do on the social ties here in Lander, even Atlantic City,

South Pass City, Riverton or Dubois or any of those other areas, they will have an impact on the town. This is important to study, too, because towns don't depend strictly upon oil and gas development or timbering or even recreation. It's a balanced approach. And this resource management plan has to be balanced, too. And it has to look at those impacts on those towns. It's very important. And because of that, because it's so heavily balanced toward development, there really isn't any kind of Wyoming characteristics in this plan.

You can take this plan and apply it to New Jersey. If you were to take the cover off of this thing, you can look at it and it would almost look like you could be doing the same thing in New Jersey or Pennsylvania or someplace like that. There is no Wyoming characteristics in here.

And one of the Wyoming characteristics that I feel strongly about is quality of life. Quantity is important. Jobs are important. But so is quality. The people that live here, what kind of recreational opportunities do they have? What kind of freedom do they have? Up in South Pass City I have a lot of freedom because I can go out in the desert. And while there is oil and gas development going on in

the Red Desert, I can still go out in the desert and have my own kind of recreation. But that's quality of life. But it's not really demonstrated in this document.

So I think when I talk about wilderness, when I talk about cultural resources, I am talking about quality of life and I am not talking about oil and gas fields or how much money or what the tax base is. When I am talking about quality of life, I am talking about something like that and that's something that is important to be put in this document.

Thanks for the opportunity to speak here tonight.

HEARING OFFICER MONROE: Thanks, Mr. Massie. The next person is Donald A. Smith.

MR. SMITH: My name is Donald A. Smith. I am here representing myself. By profession I am a mining engineer. I am a westerner. I have lived in western United States my entire life. When I read this plan, I was not too pleased with it. My displeasures were very much the opposite of the previous speaker.

I have done a little research in recent times in connection with another matter where I have

quantified the amount of wilderness that we have in our state, in our region. The state of Wyoming at the present time has 4.99J percent of its land area tied up in wilderness. Of all the wilderness in the Forest Service system, which amounts to some 28-plus million acres, Wyoming has about 3.1 million acres of this, or of the total Forest Service wilderness, we have in our boundaries 10.8 percent of the total. I feel that this price is too much to pay for our citizens, for our job opportunities, for our way of life.

In this region, this wilderness that we are talking about, 80 percent of it is in our immediate locale, in the counties of Fremont, Park, Teton and Sublette and a little bit of Lincoln. This land that's tied up in wilderness is being taken out of production for the economic benefit not only of the people working in the several industries which are dependent upon this, but for the general tax base.

In my industry, I know that for every job we have in the industry, we create approximately five more jobs to serve the people that are working in the industry itself. If we let our traditional industries which we have been dependent on this state since the very beginning fall into disuse for putting

state afford one more square inch of wilderness within our boundaries.

On top of the wilderness that we are saddled with, we also have about two and a half million acres of national park which is taken out of production for the benefit of everybody as well.

I didn't realize when I put an X on the paper that I was going to be following the gentleman that just spoke. But he brought up a number of points I would like to refute.

I guess everybody is aware if they listened to the radio, read the newspaper, at the present time in the United States our balance of payments is negative in the amount of about a hundred and fifty billion dollars a year. We are at the present time importing somewhere between 50 and 60 percent of our petroleum needs. Certainly under those circumstances we would be highly foolish to exclude any area that had a reasonable petroleum potential from exploration.

It's been said very recently by somebody that if we were to get into a war of the magnitude of World War Two, we would not have the petroleum to keep us going for six months at the present state of development. Now, lots of people will say, "Yes, that's fine. We got through the last one." They

the land into wilderness so that somebody can get some solitude which they could get just as well in a jail cell, we are doing so at the detriment of all the people in our community and our state.

I just got some information today. 43 percent of the tax base in the state of Wyoming is attributable to the mineral industry, which, of course, includes oil and gas. Somewhat close to 80 percent of the taxes that are paid in this state come from the same set of industries. Certainly anybody that looks at these kind of figures must come to realize that a healthy mineral industry, oil and gas industry, timber industry and agriculture which are our primary sources of internal revenue must be preserved.

Anybody can recreate in almost any kind of land under almost any kind of conditions. I have lived in a good part of the world at various times. You can find recreational opportunities anywhere from the top of the highest mountain to the seashore and below it.

We cannot afford, this state cannot afford to lock up its potentials in wilderness to the detriment of the state. And that's precisely what is being proposed. I submit that we cannot in this

will say, "Well, if that happens, we can go and do this exploration and do this development." But there is a very long lag time between the time that you do the first seismic work and you have a producing oil field. It's about ten times longer in the case of hard rock minerals.

It's essential not only for the good of the citizens of our state but for the security of our country that our mineral and petroleum resources be explored, be ready for production at the time that they shall be needed. There is only one way to do this and that's to get out on the land and do the foot work that's necessary to make these determinations.

So, in summary, I feel that under the circumstances that we are in, both economically and because of the overwhelming burden that our state now is suffering under from wilderness and national park, that no more wilderness should be assigned within our boundaries.

HEARING OFFICER MONROE: Thank you, sir. Appreciate your taking the time to come over.

Does anyone else in the audience wish to offer oral comments?

MR. WOLTERSDORF: Yes, I would.

HEARING OFFICER MONROE: Sir.

MR. WOLTERSDORF: I didn't realize that you had to have a special X on it or a special statement. But I would like to give a comment or two.

HEARING OFFICER MONROE: Would you identify yourself?

MR. WOLTERSDORF: My name is Don Woltersdorf. I am a real estate appraiser in Lander, Wyoming. I would like to give you a little background on myself before I make my statement.

I was raised in the state of Wyoming. I first came here as a little boy about four years old in 1920, in the twenties, early twenties, '23. And I observed the federal lands in the state of Wyoming most of my life. I have spent most of my life in the state of Wyoming. I am a graduate of the University of Wyoming.

I can remember when we had public domain. We didn't have anybody like you people at all -- the public domain. Then we had Taylor Grazing. I want to emphasie the word "grazing." In other words, the most important use the lands that you administer were Grazing. That's the forerunner of your organization, The Taylor Grazing. Of course, I also understand that you absorbed the General Land Office. I am also

an engineer so I understand that.

HEARING OFFICER MONROE: And the Surveyor General.

MR. WOLTERSDORF: And the surveyor, yeah. But having lived in Wyoming, I have worked all over the state of Wyoming and observed Wyoming from A to Z, top to bottom. I have hunted and fished. I have roamed all over the state. And wilderness to me -- I agree with this second speaker totally. We have enough wilderness to last us forever. As far as I am concerned, we don't need any more wilderness. As a matter of fact, my understanding of wilderness is that it's untrampled by man. It's pristine. And I don't think there is one square inch of BLM land is -- fits that category. And a lot of forest land now doesn't. I am sure of that because we got signs on our lakes says "Don't drink the water." And I never had that when I was a young man.

But my main point is after saying this that I want to congratulate you as I understand your recommendation that you're recommending no more wilderness in BLM land. Is that correct?

MR. KELLY: Of the six areas that are addressed in that document, there is one of the WSAs that are recommended for partial wilderness that Mr.

Massie mentioned.

MR. WALTERSDORF: I want to compliment you on the recommendation position of no more wilderness, because the man that was -- the first man to speak talked about recreation vehicles on the lands that you were studying. Now, to me, if that's wilderness -- if a recreational vehicle can get on the land, how can that be wilderness?

I am getting so I can't hardly go to wilderness areas anymore, well, I consider wilderness because I get to the point that I can't physically go. But when you can drive a recreational vehicle on the land that you are studying, how can that be wilderness? And I think, too, also, that the federal lands and the state of Wyoming have a very strong effect on our economy and they probably have a more -- well, they have at least equal effect of all the private lands on all our economy and maybe even more so. When you consider the oil and gas and minerals, they probably have a more -- a stronger effect. And I happen to be one that likes to see people be able to make a living here to enjoy the wilderness.

Thank you very much.

HEARING OFFICER MONROE: Thank you, sir. Would anyone else care to offer testimony

tonight?

MR. ENGELS: Could I ask a question?

HEARING OFFICE MONROE: Yes, sir.

MR. ENGELS: My name is David Engels. I am from Lander. I am not sure of the reading in the back of the wilderness supplement. Am I correct in assuming that at the moment the BLM does not administer any wilderness land in Wyoming?

HEARING OFFICER MONROE: That's correct.

MR. ENGELS: Does it administer wilderness anywhere in any other state?

HEARING OFFICER MONROE: Yes, sir, it does.

MR. ENGELS: Is that right?

HEARING OFFICER MONROE: No, not -- unless there were some instantly created areas by legislation, we have some wilderness in Oregon that I know of, Utah, Colorado -- no, not Utah yet; Colorado; Arizona, yes. The Bureau's first wilderness study, designated wilderness area was in Arizona.

MR. ENGELS: Okay. Help me resolve a household dispute. When -- if an area were designated a wildnerness area such as, for example, Sweetwater County, does that require more work than the present status quo or less?

HEARING OFFICER MONROE: Depends on the management plan for a given area. You can't say just planning that it requires more or less work.

MR. ENGELS: Thank you.

HEARING OFFICER MONROE: Anyone else care to ask questions or offer testimony? As I did say, the record will be open until the 14th of February for any written comments.

Sir?

MR. KENDALL: I am not familiar with the format of this meeting and who gives testimony and how this -- I have some questions that come to mind after talking to the speakers. But is this the proper time to ask or --

HEARING OFFICER MONROE: Well, at the conclusion of the formal hearing, Jack Keller and the staff here from the Lander Resource Area or from the Rawlins District would be able to respond to any of your questions. But this is supposed to be a formal hearing that just accepts information.

MR. KENDALL: Okay.

HEARING OFFICER MONROE: But a lot of the staff are here and would be very happy to talk to you on the issue.

MR. KENDALL: I would just then make a

comment then.

HEARING OFFICER MONROE: Could you identify yourself for the record?

MR. KENDALL: Yeah. My name is Rob Kendall. I live in Riverton and I came over. I work for a company that's involved in the minerals business, and I just had some questions on some things that I thought would be brought up here.

One of the first things that comes to my mind when we were examining the wilderness issue, is, like the gentleman that just spoke, wilderness has such a pristine name, you know, you assume that -- it brings many connotations.

But when we think about it, I would wonder who could use the wilderness. Can the aged people use it? Can anybody that has a handicap utilize the wilderness? Can anybody that can't hike five or ten miles use it? And I think these are concerns that we almost have to have ourselves as we place more and more of our lands into this type of holding. Can the people that don't have the money or the time to come out here and buy nice backpacking gear, whatever, can they utilize those things?

Fortunately, I am young and I can. But I know a lot of people that can't. And I think that's

something that we need to examine.

The first speaker addressed the social impact if we allowed development to come to this area, how -- some of the very terrible things, you know, that might happen, the things that I can see might happen that might occur if we do allow development in oil and gas and whatever I think would be the unemployment would go down, the foreclosures would go down, the taxes would go down, the filing for bankruptcy would go down. And I think, you know, that those should be listed in our concerns of quality of life.

I have worked near Jeffrey City and I know many of the people in Jeffrey City and I think we could ask them some real heart-rending questions about their quality of life if that's our concern with wilderness.

I think that most of the other comments that I would like to make would be probably addressed better and asked of people, the gentlemen here with BLM when we have a question-and-answer period. And that's all I really have to say right now. But those are are some concerns we have to think about when we consider wilderness.

HEARING OFFICER MONROE: Thank you.

Well, if there are no other persons who wish to offer testimony, the hearing will now be closed. And as I said, the hearing is open until the 14th of February. And any comments that anyone cares to make on the draft plan will be welcome at that time.

The hearing is now closed. Thank you all for coming.

(Hearing proceedings concluded 7:43 p.m., December 12, 1985.)

CERTIFICATE

I, JOHN E. WALZ, a Registered Professional Reporter, do hereby certify that I reported by machine shorthand the proceedings contained herein and that the foregoing 34 pages constitute a full, true and correct transcript.

Dated this 31st day of December, 1985.

JOHN E. WALZ, RPR, CM

APPENDIX A

WILDERNESS PROTECTION STIPULATION

By accepting this leases, the lessee acknowledges that the lands contained in this lease are being inventoried or evaluated for their wilderness potential by the Bureau of Land Management (BLM) under section 603 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2743 (43 USC Sec. 1782), and that exploration or production activities which are not in conformity with Section 603 may never be permitted. Expenditures in leases on which exploration drilling or production are not allowed will create no additional rights in the lease, and such leases will expire in accordance with law.

Activities will be permitted under the lease so long as BLM determines they will not impair wilderness suitability. This will be the case either until the BLM wilderness inventory process has resulted in a final wilderness inventory decision that an area lacks wilderness characteristics, or int he case of a wilderness study area until Congress has decided not to designate the lands included within this lease as wilderness. Activities will be considered nonimpairing if the BLM determines that they meet each of the following three criteria:

(a) It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs b. and c. below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as it can easily and immediately be terminated at that time, if necessary to management of the area as wilderness.

(b) Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by that date. If the wilderness study is postponed, the reclamation deadline will be extended accordingly. If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within 4 years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory until dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness.

The reclamation will, to the extent practicable, be done while the activity is in progress. Reclamation will include the contouring of the topography to a natural appearance (not necessarily to the original contour), the replacement of topsoil, and the restoration of plant cover at least to the point where natural succession is occurring. Plant cover will be restored by means of reseeding or replanting, using species previously occurring in the area. If necessary, irrigation will be required. The reclamation schedule will be based on conservative assumptions with regard to growing conditions, so as to ensure that the reclamation will be complete, and the impacts will be substantially unnoticeable in the area as a whole, by the time the Secretary is schcduled to send his recommendations to the President. ("Substantially unnoticeable" is defined in Appendix F of the Interim Management Policy and Guidelines for Lands under Wilderness Review.)

(c) When the activity is terminated, and after any needed reclamation is complete, the area's wilderness values must not have been degraded so far, compared with the area's values of other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness. The wilderness values to be considered are those mentioned in section 2(c) of the Wilderness Act, including naturalness, outstanding opportunities for solitude or for primitive and unconfined recreation, and ecological, geological or other features of scientific, educational, scenic, or historical value. If all or any part of the area included within the leasehold estate is formally designated by Congress as wilderness, exploration and development operations taking place or to take place on that part of the lease will remain subject to the requirements of this stipulation, except as modified by the Act of Congress designating the land as wilderness. If Congress does not specify in such act how existing leases like this one will be managed, then the provisions of the Wilderness Act of 1964 will apply, as implemented by rules and regulations promulgated by the Department of the Interior.

APPENDIX B

WYOMING BLM STANDARD MITIGATION GUIDELINES FOR SURFACE-DISTURBING ACTIVITIES

1. Surface Disturbance Mitigation Guideline

Surface disturbance will be restricted in any of the following areas or conditions. Modifications to this limitation may be approved in writing by the Authorized Officer.

a. Slopes in excess of 25 percent.

b. Within important scenic areas identified in a land use plan (Class I and II Visual Resource Management areas).

c. Within 500 feet of surface water and/or riparian areas.

d. Within either one-quarter mile or the visual horizon (whichever is closer) of historic trails.

e. Construction with frozen material or during periods when the soil material is saturated, frozen, or when watershed damage is likely to occur.

Guidance

The intent of the **Surface Disturbance Mitigation Guideline** is to inform interested parties (potential lessees, permittees, or operators) that when one or more of the five conditions (a through e) exists, surface-disturbing activities will be restricted or prohibited, unless or until the permittee or his designated representative and the surface management agency (SMA) arrive at an acceptable plan for mitigation of anticipated impacts. This negotiation will occur prior to development.

Specific criteria (e.g., 500 feet from water) have been established based upon the best information available. However, such items as geographical areas and seasons must be delineated at the field level.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals, such as, plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

2. Wildlife Mitigation Guideline

a. To protect important big game winter habitat, activities or surface use will not be allowed during the period from November 15 to April 30 within certain areas encompassed by the authorization. The same criterion applies to defined big game birthing areas from the period of May 1 to June 30.

   This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

   Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

b. To protect important raptor and/or sage and sharp-tailed grouse nesting habitat, activities or surface use will not be allowed during the period from February 1 to July 31 within certain areas encompassed by the authorization. The same criterion applies to defined raptor and game bird winter concentration areas from the period of November 15 to April 30. This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

   Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

c. No activities or surface use will be allowed on that portion of the authorization area identified within (*legal description*) for the purpose of protecting (e.g., *sage/sharp-tailed grouse breeding grounds, and/or other species/activities*) habitat.

   Modifications to this limitation in any year may be approved in writing by the Authorized Officer.

d. Portions of the authorized use area legally described as (*legal description*) are known or suspected to be essential habitat for (*species*

name), which is a threatened/endangered species. Prior to conducting any on-site activities, the lessee/permittee/operator will be required to conduct inventories or studies in accordance with BLM and Fish and Wildlife Service (FWS) guidelines to verify the presence or absence of this species. In the event that (*species name*) occurrence is identified, the lessee/permittee/operator will be required to modify operational plans to include the protection requirements of this species and its habitat (e.g., *seasonal use restrictions, occupancy limitations, facility design modifications*).

Guidance

The **wildlife mitigation guideline** is intended to provide two basic types of protection, seasonal restriction (a and b) and prohibition of activities or surface use (c). Item d, of course, is specific to situations involving threatened and endangered species. Legal descriptions will ultimately be required and should be measurable and legally definable. There are no minimum subdivision requirements at this time. The area delineated can and should be defined as necessary, based upon current biological data, prior to the time of processing an application and issuing the use authorization. The legal description must eventually become a condition for approval of the permit, plan of development, and/or other use authorization.

The seasonal restriction section identifies three example groups of species and delineates three similar time frame restrictions. The big game species, including elk, moose, deer, antelope, and bighorn sheep, all require protection of crucial winter range between November 15 and April 30. Elk and bighorn sheep also require protection from disturbance during the period of May 1 to June 30, when they typically occupy distinct calving and lambing areas. Raptors include eagles; accipiters; falcons (peregrine, prairie, and merlin); buteos (ferruginous and Swainson's hawks); osprey; and burrowing owls. The raptors, sage grouse, and sharp-tailed grouse all require nesting protection during periods between February 1 and July 31. The same birds often require protection from disturbance during the period of November 15 through April 30 while they occupy winter concentration areas.

Item c, regarding the prohibition of activity or surface use, is intended for protection of unique wildlife habitat areas or values within the use area. These areas or values must be factors that limit life-cycle activities (e.g., sage grouse strutting grounds, known threatened and endangered species habitat) that cannot be protected using seasonal restrictions.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals such as plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

3. Cultural Resource Mitigation Guideline

When a proposed discretionary land use has potential for affecting the characteristics which qualify a cultural property for the National Register of Historic Places, mitigation will be considered. In accordance with Section 106 of the Historic Preservation Act, procedures specified in 36 CFR 800 will be used in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation in arriving at determinations regarding the need and type of mitigation to be required.

Guidance

The preferred strategy for treating potential adverse effects on cultural properties is *avoidance*, not prohibition. If avoidance involves project relocation, the new project area may also require cultural resource inventory. If avoidance is imprudent or unfeasible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protective barriers and signs, or other physical and administrative measures.

Reports documenting results of cultural resource inventory, evaluation, and the establishment of mitigation alternatives (if necessary) shall be written according to standards contained in BLM Manuals, in the cultural resource permit stipulations, and in other policy issued by the BLM. These reports must provide sufficient information for Section 106 consultation. Reports shall be reviewed for adequacy by the appropriate BLM archaeologist. If cultural properties on, or eligible for, the National Register are located within these areas of potential impact and cannot be avoided, the Authorized Officer shall begin the Section 106 consultation process in accordance with the procedures contained in 36 CFR 800.

Mitigation measures shall be implemented according to the mitigation plan approved by the BLM Authorized Officer. Such plans are usually prepared by the land use applicant's contract archaeologist according to BLM specifications. Mitigation plans

will be reviewed as part of Section 106 consultation for National Register eligible or listed properties. The extent and nature of recommended mitigation shall be commensurate with the significance of the cultural resource involved and the anticipated extent of damage. Reasonable costs for mitigation will be borne by the land use applicant. Mitigation must be cost-effective and realistic. It must consider project requirements and limitations, input from concerned parties, and be BLM-approved or BLM-formulated.

Mitigation of paleontological and natural history sites will be treated on a case-by-case basis. Factors such as site significance, economics, safety, and project urgency must be taken into account when making a decision to mitigate. Authority to protect (through mitigation) such values is provided for in FLPMA, Section 102(8). When avoidance is not possible, appropriate mitigation may include excavation (data recovery), stabilization, monitoring, protection barriers and signs, or other physical and administrative protection measures.

4. Special Resource Mitigation Guideline

To protect (*resource value*), activities or surface use will not be allowed (i.e., *within a specific distance of the resource value or between date-to-date*) in (*legal subdivision*).

This limitation may or may not apply to extended long-term operation and maintenance of a developed project, pending environmental analysis of any operational or production aspects.

Modifications to this limitation in any year may be approved in writing by the Authorized Officer. **Example Resource Categories** (Select or identify category and specific resource value):

a. Recreation areas.

b. Special natural history or paleontological features.

c. Special management areas.

d. Sections of major rivers.

e. Prior existing rights-of-way.

f. Occupied dwellings.

g. Other (specify).

Guidance

The *Special Resource Mitigation Guideline* is intended for use only in site-specific situations where one of the first three general mitigation guidelines will not adequately address the concern. The resource value, location, and specific restriction must be clearly identified. A detailed plan addressing specific mitigation and special restrictions on development will be required prior to development and will become a condition for approval of the permit, plan of development, or other use authorization.

Waiver or modification of requirements developed from this guideline must be based upon environmental analysis of proposals such as plans of development, plans of operation, or Applications for Permit to Drill and, if necessary, must allow for other mitigation to be applied on a site-specific basis.

5. No Surface Occupancy Guideline

No surface occupancy will be allowed on the following described lands (*legal subdivision/area*) because of (*resource value*). **Example Resource Categories** (Select or identify category and specific resource values):

a. Recreation areas (e.g., campgrounds, historic trails, national monuments).

b. Major reservoirs/dams.

c. Special management areas (e.g., ACEC, known threatened and endangered species habitat, wild and scenic rivers).

d. Other (specify).

Guidance

The **No Surface Occupancy (NSO) mitigation guideline** is intended for use only when other mitigation is determined insufficient to protect the public interest adequately, and it is the only alternative to "no development" or "no leasing." The legal subdivision and resource value of concern must be identified and be tied to an NSO land use planning decision.

Waiver of or exception(s) to the NSO requirement will be subject to the same test as was used to justify its imposition. If, upon evaluation of a site-specific proposal, it is found that less restrictive mitigation would adequately protect the public interest or value of concern, then a waiver or exception to the NSO requirement is possible. The record must show that because conditions or uses have changed, less restrictive requirements will protect the public interest. An environmental analysis must be conducted and documented (EA or EIS, as necessary) in order

to provide the basis for a waiver or exception to an NSO planning decision. If the waiver or exception is found to be consistent with the intent of the planning decision, it may be granted. If found inconsistent with the intent of the planning decision, a plan amendment would be required before the waiver or exception could be granted.

When the "no development" or "no leasing" option is considered, a rigorous test must be met and fully documented in the record. This test must be based upon stringent standards described in the land use planning document. Since rejection of all development rights is more severe than the most restrictive mitigation requirement, the record must show that consideration was given to development subject to reasonable mitigation, including no surface occupancy. The record must also show that other mitigation was determined to be insufficient to protect the public interest adequately. A "no development" or "no leasing" decision should not be made solely because it appears that conventional methods of development would be unfeasible, especially where an NSO restriction may be acceptable to a potential permittee. In such cases, the potential permittee should have the opportunity to decide whether or not to go ahead with the proposal (or accept the use authorization), recognizing that an NSO restriction is involved.

APPENDIX C

GEOLOGIC TIME SCALE

Era	Period	Epoch	Duration in Millions of Years (Approximate)	Millions of Years Ago (Approximate)
		Recent	Duration	5,000 Years
	Quaternary	Pleistocene	2.5	= 2.5
		Pliocene	4.5	= 7
		Miocene	19	= 26
Cenozoic	Tertiary	Oligocene	12	= 38
		Eocene	16	= 54
		Paleocene	11	= 65
	Cretaceous		71	= 136
Mesozoic	Jurassic		54	= 190
	Triassic		35	= 225
	Permian		55	= 280
	Pennsylvanian		45	= 325
Paleozoic	Mississippian		20	= 345
	Devonian		50	= 395
	Silurian		35	= 430
	Ordovician		70	= 500
	Cambrian		70	= 570
Precambrian			4,030	

GLOSSARY

ALLUVIUM. Unconsolidated material deposited relatively recently in geologic time by a stream or other body of running water.

AMPHIBOLITE ROCKS. Metamorphic rock consisting essentially of amphibole, a group of minerals with essentially like crystal structures involving a silicate chain, OH (Si_4O_{11}).

ANTICLINE. An upfold or arch of stratified rock in which the beds or layers bend downward in opposite directions from the crest or axis of the fold.

AREA OF CRITICAL ENVIRONMENTAL CONCERN. An area within the public lands designated for special management attention to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards.

ARGILLACEOUS. Of, relating to, or containing clay or clay minerals.

BIOTITE-CHLORITE SCHISTS. Black or dark green metamorphic crystalline rock.

CHANNERY LOAM. Loam containing thin, flat coarse fragments of limestone, sandstone, or schist, having diameters as large as 6 inches.

CHUKAR. An Indian rock partridge that is gray with black and white bars on the sides and a red bill and legs.

COLLUVIUM. Loose incoherent deposits at the foot of a slope or cliff, brought there primarily by gravity.

CROWNED AND DITCHED ROAD. A constructed road graded to facilitate drainage.

CRUCIAL WINTER RANGE. An area of crucial importance to the survival of a local wildlife population during the periodic occurrence of severe winter conditions.

CULTURAL RESOURCES. Fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains; (2) areas where significant human events occurred, even though evidence of the event no longer remains; and (3) the environment immediately surrounding the actual resource. Cultural resources, including both prehistoric and historical remains, represent a part of the continuum of events from the earliest evidences of humans to the present day.

DIKE. A thin, sheet-like intrusion of igneous rock cutting across the bedding or foliation of the country rock.

DIP. The angle between the bedding plane or fault plane and the horizontal plane.

DIRECTIONAL DRILLING. A method of drilling in which the direction of the hole is planned before.

DRILL-STEM TEST. Bottom-hole pressure information obtained and used to determine formation productivity.

ECOSYSTEM. A functional system that includes the organisms of a natural community together with their environment.

FORB. An herb other than grass; a broadleaf herb.

GNEISS. A laminated or foliated metamorphic rock.

GNEISSIC. Referring to gneiss, a foliated metamorphic rock corresponding in composition to granite.

HABITAT. The place where a plant or animal species naturally lives and grows.

HABITAT MANAGEMENT PLAN. The BLM's plan for habitat maintenance and improvement. The primary vehicle used in the BLM to fund habitat projects.

HEMATIFEROUS BIOTITE SCHISTS. A schist containing mostly biotite mica with an unusually high content of hematite (iron oxide).

HYDROTHERMAL. Pertaining to the action of hot aqueous fluids or solutions on rocks or mineral deposits.

IGNEOUS. Rock formed by solidification of a molten magma.

LITHIC WORKSHOP. An area where stone tools were manufactured.

LIVESTOCK GRAZING OPERATIONS. Operations under permit where the primary purpose is the grazing of livestock for the production of food and fiber. Includes pack and saddle stock used in conjunction with such operations.

LOAM. A fertile and humus-rich soil consisting of a friable mixture of 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand.

MAFIC. Containing abundant dark colored minerals such as amphibolis, pyroxenes, and certain feldspars.

METASEDIMENTS. A sediment of sedimentary rock which shows evidence of metamorphism.

MINERAL WITHDRAWAL. Removal of specific federal lands from availability for mineral development.

NEPHRITE JADE. Less valuable jade.

NO SURFACE OCCUPANCY STIPULATION. A stipulation placed on a lease that prohibits any surface-disturbing activities in the lease area. See appendix C.

OFF-ROAD VEHICLE. Any motorized tracked or wheeled vehicle designed for cross-country travel over any type of natural terrain. Exclusions (from Executive Order 11644, as amended by Executive Order 11989) are nonamphibious registered motorboats, any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes, any vehicle whose use is expressly authorized by the authorizing officer or otherwise officially approved, vehicles in official use, and any combat support vehicle in times of national defense emergencies.

PEGMATITE. A very coarse-grained igneous rock with a composition similar to granite. It is usually found in veins or dikes.

PERMEABILITY RATE. The capacity of a porous rock, soil, or sediment for transmitting a fluid without damage to the structure of the medium.

PRECAMBRAIN ROCKS. Igneous and metamorphic rocks formed during Precambrian time, which ended approximately 570 million years before present.

PREHISTORIC. Pertaining to the period of time before written history. In North America, prehistoric usually refers to the pre-Columbian period (before 1492).

PRIMITIVE AND UNCONFINED RECREATION. Nonmotorized and nondeveloped types of outdoor recreational activities.

GLOSSARY

PRODUCTION TEST. Test of a well's productive capacity for hydrocarbons in a particular formation or reservoir that is performed after the casing is set and through perforations in that casing.

PROSPECT. To search for minerals or oil by looking for surface indications, by drilling boreholes, or both. Also, a plot of ground believed to be mineralized enough to be of economic importance.

RADIOMETRIC SURVEY. A survey conducted with a radiometer, an instrument that detects and measures the intensity of electromagnetic or acoustic radiation.

REACH. A straight, continuous, or extended part of a river stream or restricted waterway.

RECREATION OPPORTUNITY SPECTRUM. For management and conceptual convenience, possible mixes or combinations of activities, settings, and probable experience opportunities have been arranged along a spectrum or continuum.

RESOURCE MANAGEMENT PLAN. A comprehensive plan that establishes land-use decisions based on the principles of multiple use and sustained yield.

RIPARIAN. Of or relating to or living or located on the bank of a watercourse.

SCENIC QUALITY CLASSES. Classes that are assigned to the land for the purpose of rating an area by landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification. There are three classes.

SCHEELITE. A calcium tungstate, $CaWO_4$, which is a commercial source of tungsten and tungsten compounds.

SCHIST. A metamorphic rock consisting predominantly of mica minerals with a parallel orientation of the mica plates.

SEEP. A spot where a fluid contained in the ground oozes slowly to the surface and often forms a pool.

SODIC. Of, relating to or containing sodium.

TUFF. Rock composed of material formed from volcanic debris ejected into the air.

URANIFEROUS. Containing uranium.

VISUAL MANAGEMENT CLASS. A category describing the different degrees of modification allowed to the basic elements of the landscape. Class designations are derived from an overlay technique that combines the maps of scenic quality, sensitivity levels, and distance zones. There are five management classes.

VISUAL RESOURCE MANAGEMENT. The system by which the BLM classifies and manages scenic values and visual quality of public lands. The system is based on research that has produced ways of assessing aesthetic qualities of the landscape in objective terms. After inventory and evaluation, lands are given relative visual ratings (management classes), which determine the amount of modification allowed to the basic elements of the landscape.

ZEOLITE. A large group of hydro-aluminosilicate minerals formed especially in beds of tuff. Sometimes valuable for chemical properties allowing them to be used in ion exchange and adsorption.

REFERENCES

Boles, James R. and Surdam, Ronald C.

1979. "Diageneses of Volcanogenic Sediments in a Tertiary Saline Lake: Wagon Bed Formation, Wyoming." American Journal of Science 279:832-853.

Hesse, K. K.

1982. "National Uranium Resource Evaluation: Thermopolis Quadrangle." Bendix Field Engineering Corp PGJF-030. Report and map prepared by Bendix under contract to U. S. Department of Energy. Cited in Tetra Tech 1983, below.

Tetra Tech

1983. GEM [Geology, Energy, and Minerals] Resource Assessment of the Granite Mountains GEM Resource Area, Wyoming." Report prepared under contract for Bureau of Land Management. On file at Lander Resource Area, Bureau of Land Management.

United States. Department of the Interior. Bureau of Land Management

1976. "Evaluation of the Mineral Potential of the Sweetwater Canyon Natural Area," by William D. Holsheimer. Report on file at Lander Resource Area, Bureau of Land Management.

1983. *Green Mountain Planning Area Rangeland Program Summary*. Rawlins, WY.

1985. *Draft Resource Management Plan/Environmental Impact Statement for the Lander Resource Area: Lander, Wyoming*. Rawlins, WY.

1986. *Final Resource Management Plan/Environmental Impact Statement for the Lander Resource Area: Lander, Wyoming*. Rawlins, WY.

United States. Department of the Interior. Geological Survey

1970. *Cenozoic Geology of the Granite Mountains Area, Central Wyoming*, by J. D. Love. Professional Paper 495-C. Washington: Government Printing Office. Prepared in cooperation with the Geological Survey of Wyoming and the Department of Geology of the University of Wyoming.

1974. *Geologic Map and Sections Showing Distribution of Tertiary Rocks Near Southeast Terminus of the Wind River Range*, compiled by N. M. Densen and G. N. Pipirangas. Map I-835.

United States. Department of the Interior. Geological Survey

1983. *Petroleum Potential of Wilderness Lands, Wyoming*, by C. W. Spencer and Richard B. Powers. Circular 902-M. N.p.

1988. *Mineral Resources of the Sweetwater Canyon Wilderness Study Area, Fremont County, Wyoming*. Bulletin 1757-D.

Wilson, William H.

1951. *A Schulite Deposit Near Lewiston, Fremont County, Wyoming*. Laramie, WY: Geological Survey of Wyoming.

Yellich, John A.; Cramer, Ronald T.; and Kendall, Robert G.

1978. "Copper Mountain, Wyoming, Uranium Deposit—Rediscovered." In *Wyoming Geologic Association Guidebook: 30th Annual Field Conference*. N.p.: Wyoming Geologic Association.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1991-573-071/44006

BLM-WY-ES-90-009-4332